

2006

# Job satisfaction of Iowa public school principals

Boris Sodoma

*University of Northern Iowa*

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# JOB SATISFACTION OF IOWA PUBLIC SCHOOL PRINCIPALS

A Dissertation

Submitted

in Partial Fulfillment

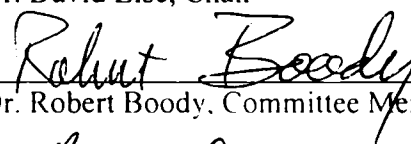
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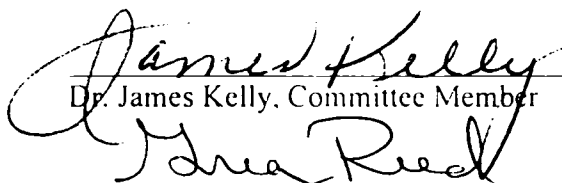
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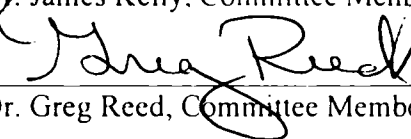
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December 2005

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# JOB SATISFACTION OF IOWA PUBLIC SCHOOL PRINCIPALS

An Abstract of a Dissertation

Submitted

In Partial Fulfillment

of the Requirements for the Degree

Doctor of Education

Approved:

A handwritten signature in black ink, appearing to read "David Else", written over a horizontal line.

Dr. David Else, Chair

A handwritten signature in black ink, appearing to read "Susan J. Koch", written over a horizontal line.

Dr. Susan J. Koch  
Dean of the Graduate College

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December 2005

## ABSTRACT

In recent decades, job satisfaction has been the theme of numerous studies in both public and private organizations. As some researchers report, the examinations into the job satisfaction of school administrators have been frequently overlooked. Little attention has been given to job satisfaction among public school principals serving at elementary and secondary levels.

On a daily basis a wide variety of demands are being placed on principals. The legislature and taxpayers demand more services, industry expects competent workers, parents insist that social issues ought to be addressed, and the public wants achievement scores to improve. As a result, principals are incredibly pressed for time and energy. Determining the job satisfaction level of principals in Iowa this study provides insight into the situation in the principalship and the support that principals need in order to feel satisfaction in their jobs.

The primary purpose of this study was to examine the job satisfaction of Iowa public school principals and contrast the current job satisfaction to the perceptions six years previously. Additional study allowed a look at the demographic components of Iowa public school principals as contrasted with the 1999 study. Further analysis examined the job satisfaction of Iowa public school principals based on sex, years served as a principal, years served in present school and type of school. Finally, it was intended to determine the relationship between overall job satisfaction and leadership and management tasks and whether there is a significant change from the 1999 to 2005 study

in motivators and hygiene factors for principals' job satisfaction as defined by Herzberg's theory.

The population for the 1999 and 2005 study was a sample of principals from Iowa public elementary, middle/junior high, and high schools. With 894 surveys completed and returned in 1999, this study proceeded with a 76% response rate. In 2005 study the response rate was 64.3%.

The results of the study showed that in spite of new added responsibilities and accountabilities principals are overall more satisfied in the 2005 than they were in 1999. Principals were very satisfied in both studies with the relationships with teachers, parents, administrative team/cabinet, board of education, with the quality of relationship with the superintendent, and with sense of accomplishments. They were less satisfied with time community demands placed on principals, salary, and the community's image of school administrators. The time available for activities that put balance in the life of principals, extracurricular demands, and time spent on leadership and management tasks were factors that were rated with lower satisfaction in both studies. The findings confirmed the trend that principals spent more time on the management of their schools than on leadership tasks. Principals were more satisfied with hygiene factors than with motivators in the 1999 and the 2005 studies. This contradicts Herzberg's Two-Factor Theory. Those principals who spent more time on management and leadership activities were more satisfied overall in both studies.

Dedicated to  
My wife Eva and daughter Linda and son Boris  
for without their support  
and understanding  
this dissertation study would have never been completed.



## ACKNOWLEDGMENTS

I would like to thank to people who made this research study possible.

I am grateful to my dissertation chair, mentor, advisor, and friend Dr. David Else, who guided this research project from the beginning. As chair, he provided excellent guidance, expertise, and the necessary motivation to keep me and the process in motion. I thank him for his support, optimism, humor, and encouragement when I needed it most. I am also grateful to the members of my committee; Dr. James Kelly, Dr Greg Reed, Dr. Robert Boody, and Dr. Roberta Davilla for their comments and suggestions in making this project the best it could be.

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## CHAPTER 1

### INTRODUCTION TO THE STUDY

Job satisfaction has been the topic of numerous studies in public and in private organizations. These studies helped determine the expectations of people working in these organizations and the elements that contributed to their level of job satisfaction. However, these studies rarely include administrators. According to Friesen, Holdaway, and Rice (1983), "Investigation into job satisfaction has usually attempted to determine the extent to which employees at the production level obtain what they want from their jobs. The need to examine the job satisfaction of school administrators has frequently been overlooked" (p. 36). Other authors agree that little attention has been given to job satisfaction among school administrators serving in elementary and secondary schools (Mack, 2000; Sablatura, 2002; Rasmussen, 1990).

At the beginning of this new millennium, school improvement continues to occupy a prominent place. However states across the country are facing a potentially major problem in securing and retaining leadership personnel who can facilitate needed improvements in schools (National Association of Elementary School Principals and National Association of Secondary School principals, 1998). One reason this is occurring is that the role of principal continues to expand (Portin, Shen, & Williams, 1998). Principals are dealing with increased job-related stress, heightened accountability, new curriculum standards, and the task of educating increasingly diverse student populations. Principals also face termination if their schools do not show instant results (Ferrandino & Tirozzi, 2001). Increased responsibilities and accountability without incentives--not the

least of which is commensurate pay--have sorely hampered school districts' ability to attract quality candidates (Blackman & Fenwick, 2000). The people who are responsible for the future of our children are vastly underpaid. Why should educators choose to become principals when senior teachers often earn more on an hourly basis than principals (Blackman & Fenwick, 2000; Ferrandino & Tirozzi, 2001; NAESP, 2003)?

District administrators and boards of education have not addressed the issue of job satisfaction as it relates to retaining principals and increasing the candidate pool (NAESP, NASSP 1998; NAESP 2003; Educational Research Service, 2000; Blackman & Fenwick, 2000). There is a gap in the literature regarding what principals must do compared to what they would prefer to be able to do in their role in the organization (Duke, 1988). Unless principals are valued adequately for their rapidly expanding roles, communities will be unable to recruit and retain the leaders they need (IEL Task Force on the Principalship, 2000).

Job satisfaction is often ignored factor in attracting and retaining principals. To keep principals motivated and in their jobs, schools need to know what the principals personally find satisfying and dissatisfying about their jobs. Furthermore, there may be differences among principals in the way they perceive job satisfaction (Sablatura, 2002).

### Statement of the Problem

The importance and need to study job satisfaction of school administrators has increased in the last decade as research show that fewer and fewer highly qualified individuals are seeking the job of principal (ERS, 1998; Papa, Lankford, and Wyckoff, 2002; Ferrandino & Tirozzi, NASSP, 2000, Behrens, 2003). A shortage of school leaders



nation-wide was reported as early as the 1980s, and continued to be prevalent in the 1990s and into the beginning of the new century (ERS, 1998; Ferrandino & Tirozzi, 2000; NAESP, 2003). The same shortage is occurring in Iowa. About 625 of the 2,000 certified individuals in Iowa licensed to serve as secondary principals are not in administrative positions (Iowa Department of Education, 2001). They have chosen not to seek employment as educational leaders. Else (1998), director of the Institute for Educational Leadership (IEL) at UNI, found that within the next nine years 48% of Iowa's superintendents were expected to retire (IEL, 1998). Many principals are also considering retiring at the earliest age they become eligible within their state retirement system. Else & Sodoma (1999) found that over half of the sample (51.8 %) of principals were considering retirement in 10 years or more. The remaining respondents were considering retirement in 1-3 years (13.8 %), 4-6 years (17.9 %), and 7-9 years (16.1 %). They planned to seek jobs outside of education. The same study also revealed that 67.2 % of the respondents were dissatisfied with the time they had outside of their jobs to provide balance in their lives. Time demands (45%) and stress (38%) were the greatest dissatisfiers for Iowa principals.

Other information confirms that a large number of principals are also going to retire soon (Ferrandino & Tirozzi, 2000, Tirozzi, & Ferrandino, 2003). In addition, the number of qualified principals who do not want to enter principalship at all is increasing (Rayfield & Diamantes, 2003). Thus, to attract new individuals and retain principals depends on whether the job meets the needs of individuals (Lacey, 2000).

Job satisfaction is characterized as the degree to which the job fulfills or allows the fulfillment of the individual's needs (Locke, 1976). Locke said job satisfaction is the pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences. Alderfer (1972) claimed that satisfaction results from the self-appraisal of one's job or job experiences in relation to needs. Job satisfaction has been conceived as the affective orientation of individuals toward work roles that they presently occupy (Vroom, 1964). Satisfaction has been thought to refer to an affective response of an individual's values and needs (Smith, Kendall, & Hulin, 1969). Job satisfaction and motivation, theoretically, are inherent aspects of work and the job itself (Harvey & France, 1997). Moreover, job satisfaction has been shown to be significantly related to employees' psychological health (Pearson, 1998). Principals who are more satisfied with their careers would be more likely to remain in the profession. Thus, to retain and motivate principals schools need a clear understanding of what principals personally find satisfying and dissatisfying about their jobs.

The study at the UNI IEL, Else and Sodoma (1999) showed that principals with more experience had a higher satisfaction in their sense of accomplishment from their work than those with less experience. While 85.6% of principals who were satisfied with their sense of accomplishment had considered leaving the principalship, this was not found to be related to income. In the same study 51% of principals who were satisfied with their job also seriously considered leaving the principalship for other than retirement reasons. The same study also revealed that principals with more experience were more satisfied with the time they had available for other activities in their lives than principals

with less experience. The respondents' satisfaction was balanced across the years they served as a principal throughout the satisfaction level (*very satisfied, moderately satisfied, neutral, moderately dissatisfied, and very dissatisfied*) with no effect found on dissatisfaction.

Sixty-two percent of principals who spent more than 65% of their day on leadership activities were *very satisfied* with their sense of accomplishment from work. However, principals who spent a small percentage of their day on leadership activities were more dissatisfied with the time they had for other activities in their lives. Seventy-one percent of principals who spent a high percentage of their day on leadership activities were also *satisfied* with the amount of time they actually spent in such activities. Few principals were *very dissatisfied* with the amount of time spent in leadership activities.

Since the 1999 study (Else & Sodoma) the role of the principal continued to change (Tirozzi & Ferrandino, 2001). The principal's job can feel overwhelming to both experienced and new administrators (Tirozzi & Ferrandino, 2001). Demands placed on principals have changed, but the profession has not changed to meet these demands, and tension is starting to show. Principals today too often are not ready to meet the demands (IEL Task Force on the Principalship, 2000). Research findings indicate that one-third of principals were not prepared for what the school expected of them (Schmidt, Weaver, & Aldredge, 2001). A new educator coming to the principalship can be confused about what is expected, what is needed, and what should be done. A sharp increase in responsibilities in recent years has made the job of principal more stressful and has discouraged teachers from taking positions in administration (NAESP, 2003). Principals are now being held

more accountable for the performance of students and teachers while, at the same time, they are required to adhere to a growing number of government regulations (NCLB, 2001). In addition, overcrowded classrooms, safety issues, and teacher shortages are all creating additional pressures on principals (IEL Task Force on the Principalship, 2000). The increase in pay is often not enough to entice people into the field (Blackman & Fenwick, 2000). Demands of the job and the time it consumes are two barriers for entering the principalship (Else & Sodoma, 1999). Principals confirm this, especially those at the high school level and women administrators. Marshall (1993) in her book explained, "Many career assistant principals observed that the tug between school and home is particularly difficult for women administrators. Many leave the high school level because they feel a real crunch at home" (p. 27). On the other hand, it is also well established that principals report a high degree of job satisfaction even though job is very demanding. It is an interesting observation, yet seemingly a conflicting one.

The principal is expected to be an instructional leader focusing on the teaching-learning process, demonstrating risk-taking and flexibility, encouraging diversity and equity, and reflecting and engaging in systematic inquiry and moral deliberation (Jacobson, 1996). Lezotte (1984) claimed that the most important factor in school reform was the principal's leadership. A successful school must have a strong leader, and the principal is the one who must provide this leadership. Edmonds (1979) confirms that strong leadership is vital to a successful school. Chubb (1987) noted that good schools have good principals, great schools have great principals, and weak schools have weak principals. The principal is a key figure in determining the ultimate success of any effort

to develop school personnel. Thus, the principal plays a major role in school improvement (DuFour, 1991).

The dichotomy between the various managerial responsibilities and educational leadership leaves practicing administrators in a quandary (Rayfield & Diamantes, 2003). Educational leadership is advocated in many principal preparation programs across the country; but principals are expected to be much more than managers (Owens, 2001). Else and Sodoma (1999) revealed that with more school autonomy and increased responsibilities, principals are forced to devote most of their time to managing schools instead of to educational leadership. A study examining perceived success among school principals in Maine revealed that principals considered themselves to be *moderately* to *very successful*, particularly in management and maintenance areas, but did not seem to feel that they were leading their schools (Donaldson & Hausmann, 1999).

#### Purpose of the Study

The primary purpose of this study was to examine the job satisfaction of Iowa public school principals and contrast the current job satisfaction to the perceptions six years previously. Additional study allowed the researcher to look at the current demographic profile of Iowa public school principals as contrasted with the 1999 study. Further analysis examined the job satisfaction of Iowa public school principals based on sex, years served as a principal, and type of school. Finally, it was intended to determine the relationship between job satisfaction and leadership and management tasks and whether there is a significant change from 1999 to 2005 in motivators and hygiene factors for principals' job satisfaction as defined by Herzberg's theory.

Determining the job satisfaction level of principals in Iowa may provide insight into the support they need to feel satisfaction in their job and, thus, remain in their job. It is also important to understand why the school principal position is becoming less popular (Else & Sodoma, 1999; Cooley & Shen, 1999).

### The Significance of the Study

This research was directed at understanding what existing data and research can tell us about individuals who hold formal positions of responsibility and authority currently defined in schools. The study provides insight into the ability of schools to attract and retain principals. The complexity of job satisfaction among school principals is examined. The study allows us to compare the level of satisfaction among Iowa elementary, middle, and high school principals. Thus, this study should be viewed as a complement to current research on the job satisfaction of public school principals. In addition, the findings of this study should also benefit to district administrators and boards of education in redefining the job responsibilities of public school principals and providing ongoing professional development that will help building leaders in cope with changing job responsibilities.

This study is necessary because there is insufficient research investigating principals' perceptions of their job activities, major time requirements, and their ability to alter the focus of their jobs and their overall job satisfaction. It is time to direct research efforts towards discovering the complexity of job satisfaction among principals. The need to study job satisfaction of administrators is heightened in educational organizations because research shows that fewer and fewer highly qualified individuals are seeking the

principalship (Cooley & Shen, 1999). Indeed, many educators certified for the principalship are currently not in leadership positions (Behrens, 2003).

With a growing emphasis on accountability, standards, and high-stakes testing (NCLB, 2001), we have to wonder what impact the demands to raise student achievement and close the achievement gap have on principal job satisfaction. Since the initial study six years ago at the University of Northern Iowa, the state has experienced multiple budget cuts, minimal allowable growth in per pupil spending, a phase-out of the budget guarantee in districts with declining enrollment, and implementation of teacher quality requirements. Endless mandates and union demands of all kinds, potential litigation, and violence concerns increase the pressures on principals. This study shows us whether all of these challenges combined with the requirements of No Child Left Behind (2001) might reasonably be expected to affect job satisfaction.

### Theoretical Framework

Human needs theories frequently have been the theoretical foundation for job satisfaction. The premise of human needs theories is that all humans have specific basic needs that drive their behavior. Satisfaction of these needs is associated with positive job attitudes.

Business and industry tried to identify the job characteristics that motivate their employees to perform the task. The method of increasing tasks of the workers has been called *job enlargement*. The concept of job enlargement is similar to what Herzberg (1959) has titled *job enrichment*. His theory postulated that one set of rewards contributes to job satisfaction and a separate set to job dissatisfaction. This Two-Factor Theory

provides the theoretical framework for this study. The questions in the principal survey measured the intrinsic and extrinsic factors of job satisfaction.

Herzberg's Two-Factor Theory posits that workers are more likely to be motivated by intrinsic job factors (motivators) related to the job itself than by extrinsic job factors (hygiene factors) related to job context. Motivators lead to satisfaction, but lack of motivators doesn't mean there is dissatisfaction. Factors that lead to satisfaction (*achievement, recognition, work itself, responsibility, advancement, and possibility of growth*) are mainly unipolar; that is, they contribute very little to job dissatisfaction. Conversely, the dissatisfiers (*company policy and administration, supervision, interpersonal relations, working conditions, and salary*) contribute very little to job satisfaction (Herzberg, Mausner, & Snyderman, 1993).

The hygiene factors do not satisfy workers, but their absence will lead to dissatisfaction. In other words, the hygiene factors or maintenance events lead to job dissatisfaction because of a need to avoid *unpleasantness*. The motivator factors lead to job satisfaction because of a need for *growth or self-actualization*. Hygiene factors represent the environment to which people are constantly trying to adjust. The hygiene factors are the major environmental aspects of work. The reason they have been named hygiene factors is that the dissatisfiers essentially describe the environment and serve primarily to prevent job dissatisfaction, while having little effect on positive job attitudes. This is an analogy to the medical use of the term hygiene meaning "preventive and environmental." Hygiene factors can be conceived of as baseline expectations of workers. They do not possess the characteristics necessary for giving an individual a sense of



growth. To feel that one has grown depends on achievement in tasks that have meaning to the individual, and since the hygiene factors do not relate to the task, they are powerless to give such meaning to the individual. Growth depends on some achievements, but achievement requires a task. The motivators are task factors and, thus, are necessary for growth. They provide the psychological stimulation by which the individuals can be activated toward their self-actualization need (Herzberg et al., 1993).

Herzberg's theory argues that motivators (intrinsic job factors) are the only factors that lead to job satisfaction. He identifies six job dimensions as motivators and 10 as hygiene factors (Herzberg, Mausner, & Snyderman, 1993). These factors have been commonly used in educational job satisfaction research (Schmidt, 1976; Friesen & Holdaway, 1983).

Job longevity also has been suggested as a factor associated with job satisfaction. Locke, Fitzpatrick, and White (1983) claimed, "Studies have shown that, typically, job satisfaction increases linearly or curvilinearly with age and /or job tenure" (p. 346). People who are on the job longer are fairly satisfied with their jobs.

Satisfaction is also associated with sex, years served in the position, education, and age. Herzberg, Mausner, Peterson, and Capwell (1957) claimed that job satisfaction has a tendency to increase with age because the individual adjusts to his/her work and life situation. As workers grow older, job satisfaction might tend to increase because the extrinsic rewards of work tend to increase with age.

In this study, a random sample of 300 principals stratified by elementary, middle, and high schools was used. From the population of approximately 1,200 principals in

Iowa, the sample of 300 was developed. Because of retirement, quitting, or other factors, it was supposed that about 80 % of principals surveyed six years ago would still be in the principalship. To gather and compare demographic and job satisfaction data and information about the self-reflective characteristics that elementary and secondary school principals currently possess, the identical questions from the 1999 study were used in the current study. Job satisfaction in the study was examined using a descriptive and group comparison approach. The results of the survey provided fuller and more complex understanding of the phenomena of job satisfaction of Iowa school principals.

Herzberg's original data were obtained through qualitative methods. Using quantitative methodology to collect data, the findings of this study provide a more comprehensive view of Herzberg's theory. Furthermore, the methodology used to collect and analyze this data within Iowa can serve as a model for conducting similar research on school principals not only in Iowa, but also in other states of the nation.

### Definition of the Terms

Barriers: Obstructions, either intrinsic or extrinsic, which create real or perceived boundaries or limitations (Shakeshaft, 1987).

Career: A person's general course of action through some or all of life with the specific purpose to support a chosen lifestyle.

Dissatisfier: Something that is not attractive about a position to a person and that would not provide the person, in that position, intrinsic and/or extrinsic rewards (D. Else, personal communication, February 18, 2005).

Elementary school: Any school consisting of grades K through 5 or K through 6.

Effectiveness: The ability to accomplish desired or intended results.

Extrinsic motivation: Rewards associated with the fair day's work focusing on the condition of the work (Sergiovanni, 2001).

High school: Any school consisting of grades 9 through 12 or grades 10 through 12.

Hygiene factors: Sources in a person's environment, which, if they are not achieved, lead to negative attitudes. They are also known as extrinsic, maintenance, or job content factors (Herzberg et al., 1993).

Instructional leader: A title for the principal responsible for implementing curricular changes and improving instruction. The instructional leader is involved in all educational activities that impact student achievement.

Intrinsic motivation: Internal satisfactions a person receives in the process of performing a particular action (Daft, 1999).

Job activities: Those responsibilities that principals carry out during the school year.

Job satisfaction: "Simply how people feel about their jobs and different aspects of their jobs" (Spector, 1997, p. 2).

Junior high school: Any school consisting of grades 6 through 9; usually grades 7 – 8.

Leadership: The quality which enables an individual within a given setting to establish an organizational vision, to motivate and inspire others to embrace that vision and achieve and maintain organizational and individual goals (Guthrie & Reed, 1991).

Management: Coordinating people and resources in an organization (Patterson, 1993).

Middle school: Any school consisting of grades through 5 through 9, or 6 through 9.

Motivation: The complex forces, drives, needs, tension states, or other mechanisms that start and maintain voluntary activity toward the achievement of personal goals (Hoy & Miskel, 1996).

Motivator: Factors in a person's environment, which, if achieved, lead to satisfaction, but if they are not achieved, no satisfaction will occur. This term is also known as intrinsic factor (Herzberg et al., 1959).

Overall job satisfaction: A state of satisfaction when perceiving the job as a whole rather than of its parts. "The overall evaluative judgment about one's job" (Weiss & Cropanzano, 1996, p. 5).

Principal: "The individual identified as the chief building level administrator" (Long, 1989, p.12).

Principal endorsement or principal license: State of Iowa authorization for the holder to serve as a principal.

Principalship: Position held by a principal.

Recruitment programs: The systemized enticement of potential candidates to a position of employment. This selection can be initiated by one organization on behalf of another and usually includes incentives to interest the candidate.

Retirement: "Voluntary or involuntary termination of employment or voluntary service because of age, disability, illness, or personal choice" (Shafritz et al., p. 400).

Satisfaction: A positive attitude or state (Alderfer, 1969).

Satisfiers: Drives and inner forces that start voluntary activity toward the achievement of personal goals and recognition. Something that would attract a person to a position and

once in that position, provide the person with intrinsic and/or extrinsic rewards (D. Else, personal communication, February 18, 2005).

Years served as principal: The demographic factor measured by number of years an individual has served in a principal position.

### Research Questions

This study is designed to determine perceptions of job satisfaction by Iowa public school principals and contrast perceptions of job satisfaction reported six years previously. These questions may reveal satisfaction variables and changes in these perceptions over time.

1. What is the overall level of job satisfaction of Iowa public school principals?
  - (a) What is the overall level of job satisfaction according to sex, years served as a principal, years served in present school, and type of school?
  - (b) What is the level of job satisfaction on each of the 20 factors for Iowa public school principals?
  - (c) What is the satisfaction level for each of the 20 factors according to sex, years served as a principal, years served in present school, and type of school?
2. Is there a significant difference in overall principal job satisfaction in 2005 when contrasted with job satisfaction in 1999?
  - (a) In overall job satisfaction according to sex, years served as a principal, years served in present school, and type of school?
  - (b) For each of the 20 factors of Iowa public school principals?

- (c) For each of the 20 factors according to sex, years served as a principal, years served in present school, and type of school?
3. Is there a significant relationship between overall job satisfaction of Iowa school principals and time spent on educational leadership activities and management tasks?
  4. Has there been a significant change from 1999 to 2005 study in motivators and hygiene factors for principal job satisfaction as defined by Herzberg's Two-Factor Theory?

#### Delimitations of the Study

1. The subjects of the study are principals of elementary, middle, and high schools in Iowa. Therefore, the results cannot be generalizable to other principals in other states.
2. The conclusions of the study are delimited only to public school principals in Iowa. The results did not measure perceptions of job satisfaction in parochial and private schools.
3. The principals' responses are delimited to the time periods during which data are collected.

#### Limitations of the Study

The study was limited in these ways:

1. Data for the study are based on the self-reported perceptions of the principals regarding their job satisfaction. This fact may have affected their responses and could lead to improper interpretations causing inaccurate responses.

2. The collection of data is subject to the limitation of survey research.

### Organization of the Study

This study of job satisfaction of Iowa public school principals is presented in five chapters. In Chapter 1, an overview of the problem, research and theory, research questions, variables of the study and delimitations is presented. Chapter 2, "Review of the Literature," examines relevant literature in the areas of motivation theory, history and measurement of job satisfaction, demographic variables and job satisfaction, women in leadership positions, the shortage of principals, what is currently being done to attract educators to the principalship, and how the principals perceive their changing responsibilities in the areas of leadership and management. Chapter 3, "Research Methodology and Procedures," explains the methods used to carry out the study. The procedures to collect and analyze data are also described. Chapter 4 on "Results" examines the findings of the study including descriptive statistics, *t* - test, correlation, and ANOVA. Chapter 5, "Summary and Conclusions," summarizes the results of the study and offers recommendations and conclusions for future research.

## CHAPTER 2

### REVIEW OF THE LITERATURE

The purpose of this chapter is to review literature pertinent to the study organized into the following five parts. The first part describes the history of the principalship, the history of job satisfaction, and definitions and measurements of job satisfaction. The second part focuses on process and content theories of motivation. The third part discusses principals and job satisfaction and the demographic variables of sex, years served as principal, and type of school. Leadership and management and women in leadership positions are explained in the fourth part. The fifth part of the chapter addresses the shortage of principals, analyzes the reasons for the shortage, and describes current efforts to recruit principals.

#### History of the Principalship

After public schools were established in the United States, a political model of governance prevailed (Guthrie, 1990). A bureaucratic model replaced the political model of school governance as school systems grew in the size. The main aim of the model was to help eliminate graft and political patronage and to improve the rapidly growing schools (Button, 1993). Bureaucratic organizations relied on the uniform application of impersonal rules and standardized procedures to achieve managerial control. The employees were evaluated on the standards of performance rather than by results (Guthrie, 1990).

At the end of the 1800s, a principal teacher was responsible for monitoring and controlling the other teachers. He also served as the instructional leader. With the growth



of schools and more pupils, new duties emerged for the principal teacher. Management, instructional leadership, hiring of people and maintaining the school building became the main activities of principal's work. "Principal teacher" became just "principal."

The role of principal later acquired a political dimension, through which the principals sought to understand and transform public expectations into formal decisions and authoritative actions (Cuban, 1988). With new accountabilities and responsibilities, the role of principals became more diverse and demanding.

Definitions of the principal's roles and responsibilities have changed over time. According to Seyfarth, "Three of the themes that appear in recent writings are the principal as a *manager-by-results*, the principal as *cultural leader*, and the principal as *professionalized manager*" (1999, p. 7). Another example of how administrative processes have been defined is the acronym POSDCoRB. This acronym means *planning, organizing, staffing, directing, coordinating, reporting, and budgeting* in the work of school principal. In 1997, the National Association of Elementary School Principals issued the document "Elementary and Middle School Proficiencies for Principals." This document contained a list of 96 proficiencies grouped into 8 categories, which defined *expertness* in the principalship. Expertness in the principalship means: (1) Leadership Behavior, (2) Communication Skills, (3) Group Processes, (4) Curriculum and Instruction, (5) Assessment, (6) Organizational Management, (7) Fiscal management, (8) Political Management.

According to Sergiovanni (2001), in recent years, more emphasis is being given to what principals in schools are supposed to accomplish as a way of defining the job. He explained:

The idea behind this trend is to determine the outcomes that schools should pursue and students should achieve. Much less attention is given to pointing out the processes that must be used. Presumably, principals in schools are expected to do whatever is necessary to achieve the outcomes. Defining the job this way has the advantage of freeing principals and others with whom they work from bureaucratic restrictions and constraints. (p. 6)

With new accountabilities and responsibilities, the role of principals became more changing and demanding.

#### History on Job Satisfaction

The first studies of job satisfaction appeared at the beginning of the 20 century. Levenstein (1912) surveyed the job satisfaction of German workers. Munsterberg (1913) in his research came to the understanding that not all workers were dissatisfied with monotonous, repetitive jobs. Fryer (1926), who studied the relationship of job satisfaction to age, education, religion, and marital status, found no significant relationships in a sample of male applicants for commercial jobs. Thorndike (1934) reported low correlations between aptitude test scores and job satisfaction ten years later.

The first really comprehensive treatment of the topic was Hoppock's *Job Satisfaction* (1935). He observed more satisfied workers than he had expected to find. He found that higher group satisfaction for a group of teachers seemed to be associated with better mental health, better human relationships, more favorable family social status, age, having religious beliefs, feelings of success, and working in a larger community. In the total community group, job satisfaction was related to sex (males were more satisfied),

occupational level (workers were more satisfied as their job level progressed from unskilled manual to professional managerial and executive), and age (older workers were more satisfied). Hoppock concluded that jobs can be measured reliably. The split-half reliability index was .93 for his four-item scale. Hoppock's results stimulated interest in surveys of satisfaction of occupational groups and in correlational studies.

Great contributions to the area of job satisfaction were made during the 1920s and 1930s included early research represented by the Hawthorne studies (Roethlisberger and Dickson, 1939) and those conducted by Mayo and associates (1945). The results demonstrated the need to change the focus in work from economic incentives, a characteristic of scientific management (Taylor, 1911), to human relationships. Job satisfaction was determined more by the work groups and supervisor than by pay, physical working conditions, and fringe benefits.

In following years, job satisfaction was the focus of repeated studies. By 1972, Kahn (1972) estimated there were over 2,000 studies of job satisfaction, and the number today is certainly larger. Relative to work, job satisfaction remains the most common topic of study. As an independent variable, job satisfaction is seen as the cause of other phenomena such as productivity and motivation. As a dependent variable, we can see job satisfaction as being caused by other conditions such as the nature of the job and individual characteristics of the person or the job.

### Defining Job Satisfaction

Despite the fact that a uniform definition of job satisfaction does not exist (Siegel & Lane, 1982), job satisfaction is generally considered to be the overall feeling a worker

has about a job. Hoppock (1935) defined job satisfaction as any combination of psychological, physiological, and environmental circumstances that cause a person to say, "I am satisfied with my job." Smith, Kendall, and Hulin (1969) defined job satisfaction as "the feelings the worker has about his job" (p. 6). These feelings were based on the individual's perceptions of the differences between what was expected as a fair and reasonable return and what was actually experienced, in relation to the available alternatives. According to Young, (1984), job satisfaction has implications for the individual related to physical and mental health, for the organization related to the acceptance of a good performance on the job, and for society related to quality and quantity of life. Locke (1969) defined job satisfaction as the pleasurable emotional state resulting from gratification or satisfaction about one's job. He saw job satisfaction as the result of the interaction of one's values and one's perceptions of the job and its environment. Lawler (1973) saw job satisfaction as the difference between what people thought they should receive and what they perceived that they actually did receive. Solly and Hohenshil (1986) noted that "job satisfaction is defined as an attitude individuals hold about their work consisting of a general or global factor of satisfaction as well as a collection of specific factors related to sources of the work environment (p. 119). Spector (1997) characterized job satisfaction as "simply how people feel about their jobs and different aspects of their jobs" (p. 2). He continued that "job satisfaction can be considered as a global feeling about the job or as a related constellation of attitudes about various aspects or facets of the job" (p. 2).

### Measurement of Job Satisfaction

The typical methods of measuring job satisfaction are interviews or questionnaires that vary primarily in their directness in assessing the concept. Both of these methods have advantages and disadvantages. The interviews are expensive and time consuming. On the other hand, they can provide the interviewer with valuable information, which had not been preplanned by the researcher (Spector, 1997). Questionnaires are less expensive, less time-consuming, and can be used to survey a large number of people. The disadvantage is that questionnaires provide less extensive information.

The most direct method is asking single question e.g. “How satisfied are you with your job?” A less direct approach uses a series of items that probe various components or indicators of job satisfaction.

The Job Satisfaction Survey (JSS) (Spector, 1985) assesses nine facets of job satisfaction, as well as overall satisfaction. They are as follows: (1) Pay, (2) Promotion, (3) Supervision, (4) Fringe benefits, (5) Contingent rewards, (6) Operating conditions, (7) Co-workers, (8) Nature of work, (9) Communication.

The scale contains 36 items and uses a summated rating scale format. Each item is a statement that is either favorable or unfavorable about an aspect of the job. From a sample of 3,067 individuals, coefficient alphas ranged from .60 for the co-worker to .91 for the total scale. The widely accepted minimum standard for internal consistency is .70 (Nunnally, 1978). Test-retest reliability reflects the stability of the scale over time. Validity is provided by studies that compare different scales with one another about the same employees (Smith et al., 1969), job characteristics as assessed with Job Diagnostic

Survey (Hackman & Oldham, 1975), such as age, organization level, absence, organizational commitment, leadership practices, intention to quit the job, and turnover (Spector, 1985).

Smith, Kendall, and Hulin (1969) have developed the Job Descriptive Index (JDI), which is an indirect measure of satisfaction that consists of word or phrase descriptions of five job facets (supervision, pay, work, promotions, and co-workers). Reliability and validity data are available on this instrument. The Job Descriptive Index has probably been the most used measure of job satisfaction. The scale assesses five facets: (1) Work, (2) Pay, (3) Promotion, (4) Supervision, (5) Co-workers.

Compiling the five facet scores into an overall score has often been done by many researchers very often in spite of the fact that it is not recommended by Ironson, Smith, Brannick, Gibson and Paul, (1989). The total score on the JDI is supposed to measure total job satisfaction. However, it is now hypothesized that total job satisfaction is more than the sum of the facets of job satisfaction (Scarpello & Campbell, 1983).

An extensive body of research utilizing the Job Description Index exists, providing good validity evidence of the JDI. The limitation is the small number of facets and the fact that some items might not be applied to all employee groups (Cook, Hepworth, Wall, & War, 1981). However, this criticism is true of all job satisfaction scales.

Another instrument often utilized in educational research is The Minnesota Satisfaction Questionnaire (MSQ) developed by Weiss, Dawis, England, and Lofquist (1967). This instrument exists in two forms: a 100-item long version and a 20-item short

form. Each item is rated on a Likert-type scale ranging from “not satisfied” to “extremely satisfied.” The short form measures these 20 facets: (1) Activity, (2) Independence, (3) Variety, (4) Social status, (5) Supervision (human relations), (6) Supervision (technical), (7) Moral values, (8) Security, (9) Social Service, (10) Authority, (11) Ability utilization, (12) Company policies and practices, (13) Compensation, (14) Advancement, (15) Responsibility, (16) Creativity, (17) Working conditions, (18) Co-workers, (19) Recognition, (20) Achievement.

The facets are in many cases more specific than in the JDI or JSS. For the short form, several studies have reported acceptable internal consistency reliabilities for intrinsic, extrinsic, and total scores (Spector, 1997). Despite the fact that both forms of the MSQ are recommended, the short form at one-fifth the length would be sufficient (Spector, 1997).

Herzberg's Two-Factor Theory (Herzberg, Mausner, & Snyderman, 1959) has often been used as a model for identifying intrinsic factors, which serve as satisfiers and extrinsic factors, which serve as dissatisfiers of the job. The authors interviewed 203 accountants and engineers and asked them to describe specific instances when they felt exceptionally good or bad about their jobs. The content analysis revealed that good critical incidents were dominated by reference to intrinsic aspects of the job (motivators) and bad critical incidents were found in reference to extrinsic factors, which the authors named as hygiene factors. Motivators were *achievement, recognition, work itself, responsibility, and possibility of growth*. The hygiene factors were *company policy and administration, supervision, interpersonal relations, working conditions and salary*.

The Job Diagnostic Survey (JDS) developed by Hackman & Oldham (1975) is a facet survey of job satisfaction to measure the effects of job characteristics on people. A scale has been developed for this purpose. Subscales measure the nature of the job, job tasks, motivation, psychological states, motivation, and reactions to the job. The format for the facet items is a 7-point scale ranging from “extremely dissatisfied” to “extremely satisfied.” The global satisfaction is also measured by a 7-point scale ranging from “disagree strongly” to agree strongly”.

The Job in General Scale (JIG; Ironson, Smith, Brannick, Gibson, and Paul, 1989) was developed to assess overall job satisfaction rather than facets. Its format contains 18 items and each item is an adjective or short phrase about the job. All items are combined for a total score. Overall job satisfaction is not the sum of individual facets, but it should be assessed with a general scale (Ironson et al., 1989). Internal consistency coefficients range from .91 to .95 and have good internal consistency reliability. It is assumed that each facet makes an equal contribution to global satisfaction, but it is unlikely that each facet has the same importance for every individual. That means that final sum of facets is only an approximate measure of overall job satisfaction, but it may not exactly match the global satisfaction of every individual.

Job satisfaction could be explained by overall job satisfaction or by satisfaction with specific factors. Spector (1997) explained:

Job satisfaction can be considered as a global feeling about the job or as a related constellation of attitudes about various aspects or facets of the job. The global approach is used when the overall or bottom line attitude is of interest, for example if one wishes to determine the effects of people liking or disliking their jobs. Most of the research assessed global job satisfaction in relation to other variables of interest. The facet approach is used to find out which parts of the job



produce satisfaction or dissatisfaction. This can be very useful for organizations that wish to identify areas of dissatisfaction that they can improve. Sometimes both approaches can be used to get a complete picture of employee job satisfaction. (p. 2, 3)

Lawler (1969) defined facet satisfaction as people's affective reactions to a particular aspect of their job and overall job satisfaction as a person's affective reactions to his/her total work role. He claimed that overall job satisfaction should not be seen as the sum of satisfaction with individual facets. His opinion is in the coincidence with Ironson (Ironson et al., 1989) who claimed that "the sum of facets is an approximation of overall job satisfaction, but it may not exactly match global satisfaction of individuals." (p.19). On the other hand, this his view contradicts the view of Dunn and Stephens (1972).

Camman, Fichman, Jenkins, and Klesh (1979) authors of The Michigan Organizational Assessment Questionnaire, designed their instrument to measure overall satisfaction.

Besides the scales discussed, many other job satisfaction scales exist and are widely utilized in educational research.

### Theories of Motivation

Several theoretical approaches to study of job satisfaction are discussed in the literature (Thompson, McNamara, and Hoyle (1997). Campbell, Dunnette, Lawler, and Weik (1970) divided the most popular theories into two groups: content theories and process theories. Content theories attempt to specify only what motivates behavior. They delineate specific needs, motives, behavior expectancies, and antecedents to behavior, or they relate behavior to outcomes or consequences. Process theories attempt to define

major variables that are necessary to explain choice, effort, the persistence of a certain behavior and try to specify how the major variables interact to influence outcomes (Hoy & Miskel, 1982).

Cognition is the use of mental representations to understand human perceptions, thoughts, knowledge, motivation, and behavior (Hoy & Miskel, 1996). Kanfer (1990) organized cognitive theories into three related paradigms: need and values theories, cognitive-choice theories, and metacognition theories. *Need and values* theories are based on the premise that the energizing force for action stems from some type of internal tension. *Cognitive-choice theories* focus on cognitive processes involved in decision-making and choice. *Metacognition theories* concentrate on self-regulation and motivational processes that form the foundation of goal-directed behaviors.

After the popularization of cognitive approaches, new models of information processing and motivation emerged. *Information processing* is a system of representation that bridges the gap between the brain, nervous system and behavior. Its representations take the forms of cognitive structures and processes for accessing and using the information (Hunt, 1991). According to this theory, individuals have internal mental models (symbol systems) of the external world that guide tasks such as problem-solving, interacting, and decision making. Characteristics of information processing models are: *rational, limited capacity, expert, and cybernetic*.

Most contemporary theories of motivation hold that the major determinants of human behavior are concepts such as beliefs, needs, perceived efficacy, attribution,

expectations, goals, and anticipations that individuals have about future events (Campbell & Pritchard, 1976).

Human needs theories have frequently been the theoretical foundation for job satisfaction. The premise of human needs theories is that all humans have specific basic needs that drive their behavior. Satisfaction of these needs is associated with positive job attitudes. Some authors claim that need theory is the most popular in job research (Spector, 1997; Thompson, et al., 1997; Weiss & Cropanzano, 1996). Popularity of need satisfaction model is attributed to its simplicity (Salancik & Pfeffer, 1977).

A number of important ideas exist about motivating people in organizations. Employees are motivated to act to satisfy various needs. Good motivation leads to better productivity of work. One of the most important parts of leader's job is to motivate people to accomplish a common vision, goals, and objectives of the organization (Daft, 1999). The leadership approach to motivation is focused on the higher needs of employees. The role of a leader is to create such organizational conditions in which employees' needs are met simultaneously with the needs of organization. School leaders agree that motivation is a critical determinant of performance in organization, but there is less agreement on the word *motivation* (Daft, 1999). Many definitions of the word motivation exist in the literature. Motivation has been defined as "those processes within an individual that stimulate behavior and channel it in ways that should benefit the organization as a whole" (Miner, 1980, p. 158). Middlemist and Hirst (1988, p. 144) claimed that motivations are "the forces acting on and coming from within a person that account, in part, for the willful direction of one's effort toward the achievement of

specific goals.” Pinder (1998) defined motivation as a set of energetic forces that originate both within as well as beyond an individual’s being to initiate work-related behavior and to determine its form, direction, intensity, and duration. Motivation is the extent to which persistent effort is directed toward organizational objectives (Lunenburg & Orstein, 2000).

Motivation means that a person works hard, the person keeps at his or her work, and the person directs his or her behavior toward appropriate goals (Johns, 1983, p. 173).

Three theories of motivation are examples of content theories: Maslow’s Theory of Psychological and Safety Needs, Aldefer’s Existence-Relatedness-Growth (E.R.G.) Theory and Herzberg’s Two-Factors Theory of Motivation. Expectancy Theory, Goal-Setting Theory, and Attribution Theory are examples of process theories. They have served as the foundation for many studies about job satisfaction of employees.

#### Process Theories of Motivation

Process theories of motivation are focused on “how” behavior is motivated. They explain the process of motivation. Some of the most important theories are mentioned below.

Vroom (1964)) developed the first complete version of the expectancy theory with applications to organizational settings. The approach is also called valence-instrumentality-expectancy VIE or value theory. Vroom’s theory examined motives through the perception of what a person believes will happen. Expectancy theory is concerned with the thinking process that individuals use to achieve rewards. Expectancy is the strength of belief that a job-related effort will result in certain performance

(Lunenburg & Orstein, 2000). It is an action-outcome association. Values range from zero, indicating no subjective probability that an act will be followed by an outcome, to 1, indicating certainty that the act will be followed by the outcome (Vroom, 1964, p.18). Instrumentality, on the other hand, is outcome-outcome association. The values range can be from -1, indicating a belief that attainment of the second outcome is certain without the first outcome and impossible with it, to +1, indicating that the first outcome is believed to be a necessary and sufficient condition for attainment of the second outcome (Vroom, 1964, p. 18). Valence is the strength of an employee's preference for a particular outcome or reward. It is assumed that valence can take a wide range of both positive and negative values (Vroom, 1964, p. 15). Expectancy theory is personalized to subordinates' needs and goals (Daft, 1999). In school settings, a principal's responsibility is to match the needs of the teachers with the goals of the school and school district.

#### Research on Expectancy Theory

Since the 1970s, investigation of the expectancy theory has significantly grown. Mowday (1978) concluded that school principals with higher expectancy motivation were more active in attempting to influence district policy than principals with lower expectancy motivation. Pulvino (1979) found principal consideration was significantly related to expectancy motivation of teachers. Findings of Miskel, McDonald, and Bloom (1983) suggested that expectancy motivation of teachers is positively related to student achievement, student and teachers' attitudes, and communication among educators.

### Critique of Expectancy Model

In spite of fact that the expectancy theory obtained the credit of researchers' approval, some problems emerged. Campbell and Pritchard (1976) claimed that expectancy theory had exceeded the measures to test it adequately. Staw and Cummings (1990) noted that the findings of research do not support the notion that individuals actually engaged in detail cognitive arithmetic before deciding at what level to perform. Some researchers were in doubt whether the model was complete in its present form (Scholl, 1981; Walker & Thomas, 1982).

### Attribution Theory

Attribution theory was developed over time from the theories of Fritz Heider, Edward Jones, Keith Davis, and Harold Kelley in the 1970s. Attribution theory was seen as relevant to the study of person perception, event perception, attitude change, and acquisition of self-knowledge (Ross & Fletcher, 1986). Attribution theory is about how people make causal explanations and about how they answer questions beginning with the word "why"? It focuses on causal explanations that individuals make about past behaviors in regard to achievement efforts, and how attributions influence behavior through their effects on expectancies (Hoy & Miskel, 1996). When individuals make causal attributions, they are trying to seek or create new knowledge. After this process, they use knowledge to better manage themselves and their environment.

Heider's book *The Psychology of Interpersonal Relationship* Heider (1958) was the first book that played a central role in the origination and definition of attribution theory. Heider postulated a set of rules of inference by which the person might attribute

responsibility to another person for an action. He believed that people act on the basis of their beliefs and that is why beliefs have to be taken into account to explain of human behavior. He distinguished between internal and external attributions and the balance of these attributions that determines the attribution of responsibility (Lewis & Daltroy, 1990). Kelley (1976) advanced Heider's theory adding the factors of consistency, distinctiveness, and consensus, which affect the formation of attributions. Jones and Davis (1965) described how an "alert perceiver" might infer another's intentions and personal dispositions from his/her behavior. Inferences are correspondent when the behavior and the disposition can be assigned similar labels.

#### Research on Attribution Theory

Weiner used the attribution concept to create a cognitive choice model of motivation (1985, 1986). He posited that information gained from people's feedback and rewards is assessed through locus, stability, and controllability. Ability and effort are internal factors and luck and task difficulty are external factors on the locus dimension. The stability designated causes as constant or varying over time. Effort is unstable but an individual's aptitude for a task is thought to be relatively fixed. Controllability refers to personal responsibility. Effort is considered as controllable, while ability and luck are believed to be beyond personal control (Weiner, 1986; Kanfer, 1990; Graham, 1991).

#### Evaluation of Attribution Theory

Graham (1991) criticized attribution theory as no more than naïve psychology that is just common sense. On the other hand, findings of other researchers support attribution

theory and effects of expectancy for future performance (Miner, 1980; Weiner, 1986; Kanfer, 1990).

### Goal-Setting Theory

Goal setting theory as a cognitive process approach of work motivation became increasingly popular during the 1970s. Goal theory was developed as an extension of attribution theory. Goals influence behavior in school organization and goal theory is a valuable tool for educational administrators. Every modern educational organizational or school utilizes some form of goal setting. Strategic planning or management by objectives requires development and stating of specific goals.

Locke (1968, 1984, 1990) and Garry P. Latham (1984, 1990) are recognized authors for their contribution to the development of goal theory, or the techniques of goal setting. A goal is defined as what an individual is trying to accomplish in a job. Values and goals are two determinants of behavior. Locke and Latham (1990) claimed that goal-setting has positive effect on motivation and performance and these positive effects generalize across settings, subjects, performance criteria, tasks, time spans, and different methods of goal setting. Specific, difficult goals and feedback improve work quality, raise job satisfaction, and produce pride in achievement (Locke & Latham, 1984).

### Research and Evaluation of Goal-Setting Theory

Chidester and Grigsby (1984) claimed that goal setting improved performance about 90% of the time. Locke and his associates revealed that goal setting resulted in a median-performance improvement of 16% and, when goal setting was combined with monetary rewards, an increase of median performance was over 40%. While a series of



laboratory experiments brought early support for Locke's ideas, there is evidence from field studies, which indicate that goal theory works in organizational settings such as schools (Latham & Yukl, 1975; Locke & Latham, 1990).

### The Content Theories of Motivation

#### Maslow's Need Hierarchy Theory

Maslow's need hierarchy theory is one of the most widely discussed theories in the study of human motivation. Campbell and Pritchard (1976) and Steers and Porter (1979) claimed that his model was not derived from systematic research but from Maslow's experience as a clinical psychologist.

Maslow structured his traditional motivational model by organizing human needs into a hierarchy. In his book *Motivation and Personality* (1970), he identified five basic needs. At the first level of the hierarchy are psychological needs, which consist of fundamental biological functions as hunger, thirst, sex, taste, smell, touch, and sleep.

Maslow described the first level of needs as follows:

Undoubtly these psychological needs are the most prepotent of all needs. What this means specifically is that in a human being who is missing everything in life in an extreme fashion, it is most likely that the major motivation would be the physiological needs rather than any others. A person who is lacking food, safety, love, and esteem would most probably hunger for food more strongly than for anything else. If all the needs are unsatisfied and the organism is then dominated by the psychological needs, all other needs may become simply non-existent or be pushed into the background.  
(p. 69)

The second level of needs includes safety and security needs. They reflect the desire to live in a peaceful, stable society. To the second level of needs Maslow explained: "If the physiological needs are relatively well gratified, there then emerges a

new set of needs, which we may categorize roughly as the safety needs” (Maslow, 1970, p. 71).

The third level includes belonging, love, and social needs, values, which are very important for life in modern society. Maslow described the third level of needs:

One thing that must be stressed at this point is that love is not synonymous with sex. Sex may be studied as purely physiological need. Ordinarily sexual behavior is multi-determined, that is to say, determined not only by sexual but also by other needs, chief among which are the love and affection needs. Also not to be overlooked is the fact that the love needs involve both giving *and* receiving love. (p. 73)

The fourth level of needs includes esteem needs. They reflect the desire to be highly respected and recognized by others. Status, achievement, recognition lead to satisfaction of esteem needs. On esteem needs, Maslow noted:

We have been learning more and more of the dangers of basing self-esteem on the opinions of others rather than on real capacity, competence, and adequacy to the task. The most stable and therefore most healthy self-esteem is based on *deserved* respect from others rather than on external fame or celebrity and unwarranted adulation. (p. 74)

The highest need level is the need for self-actualization. Maslow considered self-actualization as a process, not an end state. He explained:

Even if all these needs are satisfied, we may still often (if not always) expect that a new discontent and restlessness will soon develop, unless the individual is doing what he is fitted for. A musician must make music, an artist must paint, a poet must write, if he is to be ultimately at peace with himself. What a man *can* be, he *must* be. This need we may call self-actualization. (p. 74)

There are some implications for school management on the basis of Maslow’s theory.

There are opportunities to motivate employees through management style, job design, company events, and compensation packages.

- Physiological Needs: provide lunch breaks, wages that are sufficient to purchase the essentials of the life, heat and air conditioning, good working conditions.
- Safety Needs: provide a safe working environment, fringe benefits, retirement benefits, and job security.
- Social Needs: Create a sense of community via team-based projects and social events, quality of supervision, professional friendship.
- Esteem Needs: Recognize achievements to make employees feel appreciated and valued. Offer job titles that convey the importance of the position, promotions.
- Self-Actualization: Provide employees a challenge and the opportunity to reach their full career potential, achievement in work, and advancement in organization.

Maslow's needs are related to one another and are arranged in a hierarchy. A common misconception is that one need must be satisfied before the next level of needs emerges. That is, low-order needs take priority--they must be satisfied before higher-order needs are activated. Physiological needs are satisfied before safety needs, safety needs are satisfied before social needs, etc. Maslow himself (1970) maintained that seldom are all lower order needs totally satisfied and that individuals may proceed up the hierarchy without absolute fulfillment of basic needs. He further maintained that for most

individuals lower order needs are regularly satisfied and higher order needs are seldom met.

### Research on Maslow's Need Theory

Maslow's need hierarchy theory is very popular and accepted but its validity is dubious (Locke, 1991). There is little research evidence to support it (Pinder, 1984), and other studies have found only modest support (Steers & Porter, 1979; Landy & Becker, 1987; Cherington, 1991). Even though Maslow's theory lacks scientific support, it is quite well-known and is the first theory of motivation to which many people are exposed.

### Alderfer's ERG Theory

Another well-known and recognized content theory of motivation is Alderfer's *existence, relatedness, and growth (ERG)*. His theory has three levels and Alderfer has been influenced by Maslow's need hierarchy. In contrast to Maslow, Alderfer's theory is more consistent with empirical findings. Alderfer himself claimed that his theory was developed to improve the explanatory power and the empirical validity of Maslow's hierarchy of needs theory (Alderfer & Guzzo, 1979).

Existence refers to our concern with the basic material requirements of existence. Existence needs involve the need for food and drink. In a work environment, the existence needs are satisfied by pay and fringe benefits. This category is similar to Maslow's psychological and safety needs. Alderfer referred to the existence needs, explaining:

Existence needs include all the various forms of material and physiological desires. Hunger and thirst represent deficiencies in existence needs. Pay, fringe benefits, and physical working conditions are other types of existence needs. One of the basic characteristics of existence needs is that they can be divided among

people in such a way that one person's gain is another's loss when resources are limited. If two people are hungry, for example, the food eaten by one is not available to the other. When a salary decision is made that provides one person or group of people with more pay, it eliminates the possibility of some other person or group getting extra money. This property of existence needs frequently means that a person's (or group's) satisfaction, beyond a bare minimum, depends upon the comparison of what he gets with what others get in the same situation. (p. 9)

Relatedness refers to the desire we have for maintaining interpersonal relationships with others-colleagues, supervisors, friends, and family. As a contrast to satisfaction of existence needs, the satisfaction of relatedness needs is a cooperative process. Open communication plays important role. Alderfer explained:

Relatedness needs involve relationships with significant other people. Family members are usually significant others, as are superiors, coworkers, subordinates, friends, and enemies. One of the basic characteristics of relatedness needs is that their satisfaction depends on a process of sharing or mutuality. (p. 10)

This need category corresponds with Maslow's social and external esteem needs.

Growth refers to an intrinsic desire for personal development. In the work environment, satisfaction of growth needs results not only in tasks where a person utilizes his or her abilities and skills but where the creativity in accomplishment of tasks is required.

This category corresponds to Maslow's self-actualization and internal esteem needs.

On growth need Alderfer said:

Growth needs impel a person to make creative or productive effects on himself and the environment. Satisfaction of growth needs comes from a person engaging problems, which call upon him to utilize his capacities fully and may include requiring him to develop additional capacities. A person experiences a greater sense of wholeness and fullness, as a human being by satisfying growth needs. Thus, satisfaction of growth needs depends on a person finding the opportunities to be what he is most fully and to become what he can. (p. 12)

The fundamental generalization of ERG theory is that individual growth proceeds in cycles of differentiation, during which people develop a more complex awareness of themselves, and integration, during which people consolidate the many components of their personalities (Hoy & Miskel, 1982).

In addition to the reduction in the number of levels, the ERG theory differs from Maslow's in the following three ways. First, unlike Maslow's hierarchy, the ERG theory allows for different levels of needs to be acquired simultaneously. Second, the ERG theory allows the order of the needs to be different. Third, the ERG theory acknowledges that if a higher level need remains unfulfilled, the person may regress to lower level needs that appear easier to satisfy (Hoy & Miskel, 1982). This is known as the *frustration-regression principle*.

Thus, while ERG theory presents a model of progressive needs, the hierarchical level is not rigid. This flexibility allows the ERG theory to account for a wider range of observed behaviors. School administrators must recognize that employees have multiplied needs to satisfy simultaneously. If growth opportunities are not provided to employees, they may regress to relatedness needs. If the manager is able to recognize this situation, then steps can be taken to concentrate on relatedness needs until the subordinate is able to pursue growth again.

#### Research on the ERG Theory

Most research tends to support Alderfer's theory over Maslow's and Herzberg's theories. Some researchers recommend ERG theory over Maslow's theory because the latter was not aimed specifically toward the study of employee motivation in the

workplace (Schneider & Alderfer, 1973). Overall, many behavioral scientists tend to view ERG theory as the most current, valid, and researchable theory based on the need concept (Alderfer, 1977).

### Two-Factor Theory

Herzberg, Mausner and Snyderman (1959) authored of a popular and exciting motivation theory that builds on Maslow's work. The new theory has been called *motivation-hygiene theory*, *the two-factor theory*, *dual-factor theory* or *Herzberg's theory*. This theory has been widely accepted by school administrators (Hoy & Miskel, 1996). The two-factor theory looks for factors that cause motivation. Its effort is not concentrated on needs energized within individual, rather its effort is focused on the work environment in order to identify factors that arouse in people either positive or negative attitudes toward their work. A semi-structured interview served as a means for gathering data. Herzberg et al. (1959) used a modified version of Flanagan's (1954) critical incidents technique.

Two hundred engineers and accountants who represented a cross-section of Pittsburgh industry were interviewed. They were asked about events they had experienced at work that either resulted in a marked improvement in their job satisfaction or led to a marked reduction in job satisfaction. The interviewer began by asking the engineers and accountants to recall a time when they felt exceptionally good about their jobs. Keeping in mind the time that had brought about the good feelings, the interviewers proceeded to probe for the reasons why the engineers and accountants felt as they did. The employees were also asked if the feelings of satisfaction in regard to their work had

affected their performance, their personal relationships, and their well-being. Finally, the nature of the sequence of events that served to return the worker's attitude to "normal" was elicited. Then the interview was repeated but the employees were asked to describe their negative feelings about their jobs. Results were consistent across the various subjects. Reported good feelings were associated and related with the job itself, it means with intrinsic or psychological factors. Herzberg named these factors *motivators*, or "job satisfiers." They include achievement, recognition, responsibility, work itself, and the possibility of growth. These factors influenced the motivation. Herzberg believed that when motivators are present, employees are satisfied and motivated. Bad feelings, on the other hand, were associated with the environment surrounding the job, or extrinsic or psychical factors. These factors are working conditions, pay and security, company policies, supervisors, interpersonal relationships, and salary. Herzberg named these factors *hygiene factors* or "job dissatisfiers," because they are preventative and environmental. When hygiene factors are poor, work is dissatisfying. Good hygiene factors remove the dissatisfaction, but they do not in themselves cause people to become highly satisfied and motivated to work (Herzberg, 1959). The results of the investigation led him to conclude that certain variables in the work situation, which he named "satisfiers," lead to overall job satisfaction, but played an extremely small part in producing job dissatisfaction, while other variables, which he named "dissatisfiers," lead to job dissatisfaction but did not lead to job satisfaction. Herzberg in his study challenged the traditional model by purposing that some job aspects lead to job satisfaction some, to dissatisfaction. He explained:



In summary, two essential findings were derived from this study. First, the factors involved in producing job satisfaction were *separate* and *distinct* from the factors that led to job dissatisfaction. Since separate factors needed to be considered depending on whether job satisfaction or job dissatisfaction was involved, it followed that these two feelings were not the obverse of each other. They are not opposites, rather they are separate and distinct dimensions of a person's attitude about work. Thus, the opposite of job satisfaction would not be job satisfaction but rather *no* job satisfaction; similarly, the opposite of job dissatisfaction is *no* job dissatisfaction, not satisfaction with one's job. The fact that job satisfaction is made up of two unipolar traits is not unique, but it remains a difficult concept to grasp. (1971, pp. 75-76)

Hygiene factors are lower-level needs. Their absence leads to dissatisfaction but the correction of these needs will not lead to satisfaction. The motivators are higher-level needs. They increase the job satisfaction beyond the neutral point, but when the motivators are not gratified, only minimal dissatisfaction results.

The role of school leaders as implied in the two-factor theory is important. Daft (1999) said: "The leader's role is to go beyond the removal of dissatisfiers to the use of motivators to meet higher level needs and propel employees toward greater achievement and satisfaction" (p. 244).

If the motivation-theory holds, management not only must provide hygiene factors to avoid employee dissatisfaction, but also must provide factors intrinsic to the work itself in order for employees to be satisfied with their jobs.

Herzberg explained that *job enrichment* is required for intrinsic motivation, and that it is a continuous management process. According to Herzberg:

The job should have sufficient challenge to utilize the full ability of the employee. Employees who demonstrate increasingly levels of ability should be given increasing levels of responsibility. If a job cannot be designed to use an employee's full abilities, then the firm should consider automating the task or replacing the employee with one who has a lower level of skill. If a person cannot be fully utilized, then there will be a motivational problem. (p. 31)

### Comparison of Two-Factor Theory with Need Hierarchy and ERG Theories

The motivation-hygiene theory has been widely accepted and used as the theoretical rationale for numerous studies in education. A close conceptual relationship exists with Maslow's need theory, Alderfer's ERG theory, and Herzberg's Two-Factor theory (Lunenburg & Orstein, 2000). Herzberg's hygienes can be related to physiological and safety needs of Maslow and existence needs of Alderfer. Herzberg's motivators have the potential to satisfy the individual need for self-actualization in Maslow's need theory and rewards reinforce the self-actualization. Alderfer's growth is connected with motivator factors, as are achievement and responsibility. Herzberg's hygienes factors resemble Alderfer's existence and relatedness. The common framework of major content motivation theories complements one another (Hoy & Miskel, 1982).

### Critique of the Two-Factor Theory

Herzberg's theory has been often criticized in spite of the fact that his approach is systematic and his language understandable. For some critics, his theory is regarded as *methodologically bound*, that is, tied to its method (King, 1970). King found five distinct versions of the two-factor theory in the literature and only limited support existed for any of these five versions. Other critics questioned the mutual exclusiveness of satisfaction and dissatisfaction dimensions. Do the motivator factors contribute only to satisfaction and the hygiene factors only to dissatisfaction? (Brockman, 1971). Salancik and Pfeffer (1977) claimed that the formulation is theoretically weak. Campbell, Dunnette, Lawler, and Weick (1970) explained: "The most meaningful conclusion is we can draw is that the two-factor theory has now served its purpose and should be altered or respectively laid

aside” (p. 381). Steers and Porter (1979) are somewhat more moderate. They claimed that Herzberg’s theory came during a time when there was an increased need to understanding the role motivation played in organizations.

His theory is important also for school administrators in order to think about what motivates teachers. Instead of concentrating on extrinsic factors as means of motivation as are salary, working condition, job security, Herzberg’s theory enabled school administrators to concentrate to the intrinsic factors such as recognition and achievement which increases the job satisfaction and lead to better work performance.

#### Research on Two-Factor Theory

The motivation-hygiene theory has been subjected to extensive research with contradictory results. Little research on the motivation-hygiene theory has been done in last 15 years (Daft, 1999).

Herzberg in his book “Work and the Nature of Man” (1971) tried to verify the original findings from his research about Two-factors Theory in work of other researchers, which supported his findings. Schwartz, Jenusaitis, and Stark (1963) using supervisory personnel in public utility industries, supported Herzberg’s findings. The subjects were 111 male supervisors. They were asked to respond to Herzberg’s factors in these two situations: one of them was to recall a pleasant experience about their employment and another was to recall unpleasant experience about their employment.

Schwartz et al. compared the study the Herzberg et al. (1959) study and came to the conclusion that their findings were close to those found in Herzberg’s study. Besides *work itself*, five motivators (*achievement, recognition, responsibility, advancement and*

*possibility of growth*) appeared more frequently in the high job attitude situations than in low attitude situations (Herzberg, 1971, p. 100).

On the other hand, four hygiene factors (*company policy and administration, interpersonal relationships with subordinates, supervision, working condition and security*) were more frequent in low job attitude situations than in high attitude situations (Herzberg, 1971, p. 101). Further, there was no variation found in analyzing personal characteristics in age, job classification, education, and personality characteristics.

In a study among Finnish supervisors, Herzberg used the same written critical incident method developed by Schwartz et al. (1963). The findings showed that five of the six motivators (*achievement, recognition, responsibility, advancement, work itself*) were found to be significantly unidirectional. *Possibility of growth* appeared more in low-feeling sequences.

Four hygiene factors were found more often in low job attitudes sequences than in high attitude experiences (*supervision, company policy and administration, working conditions, and interpersonal relations with peers*).

In this study a motivator was never found more frequently in the low attitudes experiences, nor was a hygiene need more frequently found for the positive attitudes (Herzberg, 1971, p.102). This study confirmed Herzberg's theory that motivators contribute more to high satisfaction while hygiene factors contribute more to job dissatisfaction regardless of the method or nationality.

The sample in Herzberg's next study was composed of 50 women employed by the United States government. These 50 women were involved in research and analytical

work in economics, languages, mathematics and engineering on a high professional level. The investigation method was an identical replication of Herzberg's theory used in his 1959 study.

The results revealed that from six motivators only four occurred significantly more often in higher sequence (*achievement, work itself, responsibility, and recognition*). *Possibility of growth and advancement* were the two motivators that did not appear at all in the study.

From the hygiene factors, *company policy and administration* was the most mentioned source of dissatisfaction. Next factors were *status, working conditions, and personal life*. Among *supervision, job security, and salary* none were not found with significant differences. The surprise was that two hygiene factors, *interpersonal relationships with subordinates* and *interrelationships with peers*, were significantly found more often in high job attitude frequencies.

Despite these findings, Herzberg stated, "These two inversions are the only failures in predictions to be found in all the studies reported" (p. 103).

Clegg replicated the original Herzberg investigation. The subjects of the study were 58 county administrators of the cooperative extension service in agriculture at the University of Nebraska. The subjects were asked to provide three positive and three negative incidents and rank their order of importance. Clegg chose one of the most important from each category. To Herzberg's 16 factors, he added two hygiene factors: *interpersonal relationship with clientele* and *relationship with members of the extension board*.

The results of the investigation revealed that two motivators-*achievement* and *recognition* and six hygiene factors-*company policy and administration, working conditions, interpersonal relationships, with subordinates and with peers, supervision, and personal life* were in congruence to Herzberg's study. One of the two added hygiene factors, *relationships with the extension board* was related to job dissatisfaction. In spite of these results, Herzberg considered the results of this investigation as verification of his theory (p. 105).

Saleh's (1964) study was intended to study attitudes toward retirement. The study sample was 85 managerial employees between the ages 60 and 65. The 16 job factors and the same method for coding and analyzing of answers were used. The results indicated that five of six motivators were found more often in a job satisfaction sequence and hygiene factors were the only factors found significantly more often among sequences of job dissatisfaction. The results confirmed the theory--89% involved the motivators, in contrast to only 33% involving negative attitude events. Hygiene factors were six times as frequent in causing negative job attitudes as they were in bringing about positive feelings.

The next replication of Herzberg's study was conducted in Veterans Administration Hospital in Utah. The sample was compounded of 29 professional nurses, 31 skilled workers employed in engineering maintenance services, and 35 unskilled workers. Taking three groups together, motivators appeared three times more often among high-job attitude sequence. Hygiene factors were found twice as often in the negative attitude events.

Among nurses, two motivators were found-*recognition* and *achievement*. Three hygiene factors were found including *company policy and administration*, *interpersonal relationship with superiors* and *working conditions*.

In the skilled group of workers, three motivators *were found in high incidents-recognition, achievement* and *possibility of growth*. Two hygiene factors, *company policy and administration* and *supervision*, were found in low incidents.

For the third group of unskilled workers, two motivators (*recognition* and *responsibility*) approached significance as differentiating job satisfaction from dissatisfaction. Three hygiene factors (*company policy and administration*, *supervision*, and *interpersonal relations with peers*) were found in low-attitude sequences. On the basis of the results, Herzberg said, “the theory still holds rather well” (p. 116).

Because this study provided only tentative results for unskilled workers who represented the lowest levels of jobs, Gendel (1965) decided to confirm Herzberg’s theory on a group of 119 housekeeping workers at two Veterans Administration hospitals in Cleveland. The higher number of people involved in the investigation led to solid statistical evidence of the theory. The motivators were found to be a 4 - to -1 majority in high job attitude sequences. The hygiene factors were associated with the low sequences in a ratio of 3 - to - 1. The significant motivators were *recognition, advancement, and responsibility*. *Working conditions, interpersonal relationships with peers, company policy and administration*, and *supervision* were hygiene factors. For the first time in any study, salary appeared as a dissatisfier in congruence with Herzberg’s theory.

### Replications in Educational Settings

Sergiovanni (1967) replicated Herzberg's study with teachers and Schmidt (1976) with school administrators. *Work itself* and *advancement* were not significant motivators for teachers. *Work itself* and *responsibility* were mentioned by administrators less frequently as motivators, and they considered *advancement* as a motivator.

The results showed that teachers have more problems with interrelationships with subordinates (students) than interrelationships with superordinates. Sergiovanni explained that teachers interact more of their daily time with students than with their superordinates. The school setting and specificity of teachers and school administrators' jobs influenced the results. The results of school administrators are similar to teachers. They have more problems with interpersonal relations with subordinates. The increased tension between principals and teachers is considered by Schmidt as the reason for these results. Despite these differences in the Sergiovanni and Schmidt findings, the Herzberg theory was upheld.

Moxley (1977) used a similar set of questions with faculty in colleges and universities in a mail questionnaire format. The replications have supported the Herzberg theory. In spite of some variations among administrators, teachers, and industrial workers, one set of factors tends to relate to job satisfaction and another set of factors tends to relate to job dissatisfaction.

The *Work Components Study (WCS) questionnaire* was developed by Robert N. Ford, Edgar F. Borgata, and George W. Bohrnstedt to merge and to operationalize the Two-Factor Theory. For them, the administrative position is connected with low security



but high opportunities in achievement and advancement. Individuals who preferred motivators should be considered as candidates for administrative positions while those participants who preferred hygiene factors should be regarded as undesirable candidates for administrative positions.

Pavalko (1971) compared the work attitudes of educators and business managers. He claimed that most business occupations favor personal aggressiveness. On the other hand, employees in the educational organizations favor less aggressive behavior.

Brown (1970) claimed that business managers are higher risk takers and they have greater achievement motivation than educational administrators. According to Miskel (1974), business managers are less concerned with hygiene factors, whereas educational administrators are concerned about hygiene factors. When risk is motivator, school administrators behave like business managers.

Miskel and Heller (1973) developed *Educational Work Components study (EWCS) questionnaire* for their study. They hypothesized that educators who are upwardly mobile seek motivator rewards and have less concern for security than those who haven't such career ambitions. This hypothesis was only partially supported. Central office administrators had less desire for security than elementary teachers and principals had a greater tolerance for work pressure than elementary teachers. The analysis of the results revealed that the higher the aspiration, the greater the desire for risk and motivator rewards.

The purpose of May's study (1986) was to determine the applicability of the Two-Factor Theory with chief administrative officers of teachers education programs.

Friedlander's Job Satisfaction Index (1963) was used to determine to what extent 18 factors, appearing on the two scales, represented satisfiers and dissatisfiers. The sample consisted of 260 chief administrative officers. May used six major hypotheses to test Herzberg's theory. Ten minor hypotheses were also tested to show a relationship between five demographic variables and satisfaction and dissatisfaction. The findings of the study revealed the motivators were most closely related to job satisfaction and hygiene factors were most closely related to job dissatisfaction. *Achievement, work itself, use of best abilities, challenging assignments, and recognition* were the most important motivators and *policies, work group, supervisor's knowledge of job, relations with superiors and working conditions* were the most important hygiene factors. From the 18 factors, 16 were significantly higher for satisfiers than for dissatisfiers. The sixth hypothesis focused on predicting scores from one scale to another. In that case, accurate predictions could not be made from items on the Job Satisfaction Scale to items on the Job Dissatisfaction Scale. The results revealed that none of the five demographic variables was significantly related to job satisfaction or job dissatisfaction. Thus, the findings of the study showed mixed results because six major hypotheses were accepted while 10 minor hypotheses were rejected. In spite of these results, the study partially supported Herzberg's motivation-hygiene theory.

The purpose of the study done Burr (1980) was to examine the job content and job context factors related to job attitudes for community college and university directors of admissions, registrars, and directors of placement, to identify motivators and hygienes relevant to these positions, and to compare the determinants of job satisfaction and

dissatisfaction among these positions and across the two types of institutions. Four directors of admissions, eight registrars, and five directors of placement were interviewed at three Florida community colleges and three universities in Florida's State University System. The replication of Herzberg's semi-structured interview was used to collect data. The findings of the study revealed that for each of the positions motivators contributed significantly more to job satisfaction than did hygiene factors thereby supporting the applicability of Herzberg's Two-Factor Theory. The determinants of job satisfaction were motivators such as *achievement, recognition the work itself, the possibility of growth, responsibility*, and the hygiene factor of *interpersonal relationship*. On the other hand, hygiene factors of *company policy and administration, interpersonal relationships, salary, supervision-technical* and motivators of *work itself* and the *presence or absence of achievement* were determinants of job dissatisfaction. There was not found a significant difference in the contribution of motivators and hygienes to the job satisfaction and job dissatisfaction between community colleges and university administrators. Among community college positions a significant difference was found in the contribution of motivators and hygiene factors to job satisfaction and job dissatisfaction. A significant difference was also found in the contributions of motivators and hygiene factors among positions at the universities.

#### Non-supportive Studies of Herzberg's Theory

The sample of 600 individuals was drawn from engineers, supervisors, and salaried employees in the Friedlander study (1963). They were asked to answer the question about "a time when you felt exceptionally good" about your job. There were

four free choice responses on the questionnaire to “time when you felt exceptionally good” about your job. Friedlander in his factor-analytic study did not obtain general intrinsic and general extrinsic factors, as the Herzberg’s theory would suggest. Instead, three distinct types of satisfaction were obtained; factors of social and technical environment, intrinsic self-actualizing work, and recognition through advancement. Age, salary and, occupational pattern did not show significant differences.

The next study testing Herzberg’s motivation-hygiene theory was done by Ewen (1964). The subjects were 1,021 full-time life insurance agents. The results of the study in 1960 and 1962 showed that various job factors did not correspond to Herzberg’s method. Some hygiene factors, *manager interest in agents and training*, were found as motivators. One hygiene factor-*salary*-was a motivator in the 1960 study and in 1962 study acted as both a motivator and a hygiene factor.

Wernimont and Dunnette (1964) compared results of their study to Herzberg’s method. They used a forced-choice checklist method of indication of the causative factors in satisfaction and dissatisfaction. Satisfiers were endorsed more often to account for *satisfying* and also for *dissatisfying* situations.

Graen (1965) used a factor analysis with groups of engineers and questioned the satisfaction dimension as clear factors.

Dunnette (1965), on the basis of his study of sample of executives, secretaries, army reserves supervision students, sale clerks, scientists, and engineers, came to the conclusion that motivation-hygiene theory was oversimplification. He noted that job

satisfaction was multidimensional. That means that some factors were able contribute to job satisfaction and to job dissatisfaction.

Malinowski and Barry (1965) in their investigation of blue-collar workers revealed that, contrary to the Herzberg theory, both satisfiers and dissatisfiers were positively related to job satisfaction.

The main purpose of the Davis (1982) study was to test the applicability of the five versions of Herzberg's theory of job satisfaction to educational administrators. A questionnaire served as the instrument for collecting data. The questionnaire was developed utilizing Osgood's Semantic Differential technique. The sample for the study was 100 superintendents throughout the United States. The findings of the study showed that each of the motivator factors and each of the four hygiene factors were significantly different. Both motivators and hygiene factors contributed to job satisfaction and job dissatisfaction of superintendents. Thus, Herzberg's motivation-hygiene theory was not supported in this study.

#### Principals and Job Satisfaction

The study of Stemple (2004) focused on the general satisfaction level of high school principals in Virginia. Demographic variables of gender, age, salary level, years as a principal, percentage of time spent with students, number of assistant principals, years in current school district, school socio-economic status, school size, adequate yearly progress, and accreditation status were also part of the Minnesota Satisfaction Questionnaire to measure level of job satisfaction with job dimension. The long version of the MSQ consisting of 100 questions was used in the study. From the population of all

289 high school principals in Virginia, 183 principals responded. The findings revealed that high school principals in Virginia were generally satisfied with their job. The mean score was 3.45 on a five-point Likert Scale. Fifty-one of the high school principals in Virginia are over age of 55. Thirty principals had 10 or more years of experience. There was not significant difference in job satisfaction regarding the age of the respondents. Both males and females were satisfied with their job. A significant difference was found in the race category. Non-white principals were significantly less satisfied than white principals. The level of satisfaction increased with salary increase. There was a significant difference between job satisfaction and number of assistant principals. The principals who had three assistant principals were more satisfied than principals who had two or less assistants or those principals who had four or more assistant principals. The study also showed that job satisfaction increased when the percentage of time principals spent with students increased. The socio-economic status of the school or student body size had no significant impact on job satisfaction. The Virginia Accreditation Status was a significant indicator of job satisfaction. Adequate Yearly Progress did not have a significant impact on job satisfaction. The principals tended to be more satisfied with these three dimensions of their jobs: keeping busy, being able to do things that do not go against their conscience, doing things for others. The study showed that high school principals in Virginia were least satisfied with the amount of pay they received for their work.

Brokke (2002) in his study “Determinants of Job Satisfaction and Job Dissatisfaction of Administrators in the American Association of Christian Schools”

focused on determining if Herzberg's theory was applicable to administrators of Christian school that are members of the American Association of Christian Schools (AACS). The sample for the study was the entire population of administrators of AACS schools with an enrolment of 100 or more. Two hundred and seventy-six respondents from North Carolina, South Carolina, Georgia, Florida, Virginia, Michigan, Indiana, and Illinois participated in the study. The first section of the questionnaire consisted of demographic questions. The second section asked participants to rate their perceived level of importance for each of 10 questions that related to Herzberg's motivation and hygiene factors. The third part of questionnaire included questions about administrators' perceived fulfillment of the same factors examined in the correlating question in the second part of questionnaire. The instrument was adapted from an instrument designed by Cates (1984). The data were collected through the Internet. Ninety percent of administrators were male, whose average age was in the 45-50 age group. Administrators reported 19 years in Christian education, five years in their present ministries. Overall job satisfaction of school administrators was 88%. The findings of the study revealed that only three of the four major tenets are supported and, therefore, this study could only partially support Herzberg's Two-Factor Theory. The group of "satisfied" administrators did found significant fulfillment from the motivation factors as a whole. They only found the value of the "work itself" significantly unfulfilling. The group of the "not satisfied" administrators found no job fulfillment in any of Herzberg's motivators or hygiene factors. The group of "dissatisfied" administrators showed no significant fulfillment from the hygiene factors. A significant fulfillment from the motivation factors of

“achievement” and “advancement” was reported in the group of “not satisfied” administrators. This group also found fulfillment in the combined motivation factors. The hygiene factor “salary” was reported by this group as a significant fulfillment. No fulfillment was found in this group in the combined hygiene factors.

Sablatura (2002), in his comparison study of job satisfaction among urban, suburban, and rural school principals found, that principals overall were well satisfied by their relationships with stakeholders and the sense of challenge and accomplishment they derived from their jobs. The principals were moderately satisfied with job factors that comprised relationships with their supervisor and other district personnel. They were less satisfied with compensation. Urban and rural principals were significantly less satisfied with compensation than suburban principals.

In his study, Sablatura mentioned the existing problems of information available in research literature on principal job satisfaction. Because most of the articles from refereed scholarly journals are British, Australian, or Canadian studies (Friesen, et. al., 1983; Johnson & Holdaway, 1990; Smith & Holdaway, 1995) the generalization of results to principals in America is not easy. In addition, any previous research conducted was done more than a decade ago, so the application of results for today’s principals could be a problem (Iannone, 1973; Schmidt, 1976). Finally, since 1990 a number of empirical studies have been done on American principals, but most of them are unpublished doctoral dissertations (Stemple, 2004; Brokke, 2002, Sablatura, 2002; Lacey, 2000).



Lacey's (2000) study was designed to determine if Friedlander's (1964) questionnaire could measure the extent of job satisfaction and dissatisfaction, as presumed by Herzberg, among Maryland public high school principals. The demographic variables that researchers developed were also part of the questionnaire. The sample was composed of all of 176 high school principals in Maryland. The study showed a limited number of statistically significant job factors based on demographic variables that contributed to job satisfaction or job dissatisfaction. Notable were differences in race and a few job factors. Some job factors associated with job satisfaction were also found as sources of job dissatisfaction. The study offered only partial support for a quantitative method of Herzberg's motivation-hygiene theory

Newbe's study (1999) examined the general satisfaction level and satisfaction with job dimension of middle school principals in Virginia as measured by the Minnesota Satisfaction Questionnaire. The demographic variables were collected through an Individual Data Sheet. The sample consisted of 188 randomly selected middle school principals in Virginia. The study findings showed that the general satisfaction score mean was 3.65 that indicated that these principals were "*satisfied*" (3.00-3.99) with their jobs. The demographic variables were within the "*satisfied*" score. The investigator also reported similar results for each of the measured job dimensions.

In Graham and Messner's (1998) study of job satisfaction of American Midwestern public school principals, the purpose was to identify the level of job satisfaction for these factors: colleagues/co-workers; the job you currently held; level of responsibility; opportunity for promotion/advancement; working conditions; pay; and the

supervisor. This Principals' Job Satisfaction Survey (PJSS) was developed and mailed to 500 elementary, middle, and high school principals. Each of the eight PJSS areas, which closely paralleled Herzberg's Two-Factor Theory, was compared to four demographic factors.

The findings revealed that principals were generally satisfied with their current job (92.9%), colleagues/co-workers (91.2%), and the level of responsibility (88.9%). Principals were less satisfied with their pay (60.2%), opportunities for advancement (61.5%), and fringe benefits (67.7%). Mid-size school principals were the most satisfied with their current job (98.8%) when compared to principals of smaller schools (87.1%) and larger schools (93.7 %). Principals in larger schools were more satisfied with pay (63.3%) than those in mid-sized schools (69.4%) or smaller schools (43.5%). In the colleague/co-worker area, 92.3% of elementary principals and 90.9% of middle and high school principals were satisfied. Male principals (63.3%) were more satisfied with their pay than female principals (53.0%) and with their fringe benefits (70.3%) than female principals (61.4 %). Principals with four to eight years of experience (47.8%) were the least satisfied with their opportunities for advancement and promotion. Principals with 15 or more years of experience (70.3%) were more satisfied with their pay than principals with fewer years of experience. Herzberg's theory was only partially supported.

Hardman, Leary, and Toth (1996) in their study, "Job Satisfaction of Female Public School Administrators in West Virginia," examined the relationship between the personality types and personal characteristics and job satisfaction of female principals. The Mohrman-Cooke-Mohrman Job Satisfaction Scale was used to measure job

satisfaction and Meyers-Briggs Type Indicator (MBTI) was used to measure personality types. The sample of this study consisted of all female public school principals, assistant principals, superintendents, deputy assistants, and associate superintendents employed in West Virginia during the 1995-1996 academic school year. The number of surveyed female principals was 324. The findings of the study revealed no significant differences between the means in any of the categories of the individual variables. The only significance resulted from the analysis of the relationships between tenure in the current position and extrinsic job satisfaction. School administrators reported higher levels of extrinsic job satisfaction with fewer years in the current position. The data collected did not show a relationship between job satisfaction and personality. A relationship of job satisfaction to marital status did not reveal a statistical significance, but the support of family, friends, and colleagues showed a significant relationship to job satisfaction. The findings of the study showed that younger female principals had significantly higher extrinsic job satisfaction scores than older female principals and the perceived level of support was significantly and positively related to overall job satisfaction.

The study of Phelps (1995) focused on factors contributing to job satisfaction and job dissatisfaction among alternative school principals. The data were collected through a modified Herzberg's semi-structured interview technique. Individual principals were asked to describe the situations when they felt extremely good or bad in their jobs. The findings of the study revealed that feelings of job satisfaction of the alternative school principals came from student success and accomplishments. Interpersonal relations and compliance with district policy were the most frequently mentioned as sources of job

dissatisfaction. Principals with multiple site responsibilities were more dissatisfied than principals responsible for single sites. The conclusion of this study supported Herzberg's Two-Factor theory of job satisfaction as it related to alternative school principals.

Penn used the Herzberg's Two-Factor Theory as a model (1995). The purpose of this study was to identify the satisfiers of selected black school administrators in Virginia. The data were collected through the use of a taped telephone interview within the confines of the Herzberg's semi-structured interview technique. Forty-one participants were selected for the study. The findings of the study revealed that *achievement, work itself, recognition, and responsibility* were identified as motivators. Black administrators in Virginia identified Herzberg's hygiene factor of *school district policy and administration* as single dissatisfier. Herzberg's motivators *job security, advancement, supervision, and growth* were identified as hygiene factors. The study partially supported Herzberg's Two-Factor Theory.

Osbum (1993) examined Florida principals' perceptions of suggested rewards as having a potential to motivate principals to accept the risks of leadership in school improvement. Attention was paid to the mitigating effects of organizational climate, culture, and structure. The selected characteristics of organizations as measured factors in examining the perceptions of the proposed rewards are included in the study. The factor analysis was used to identify three-factor motivation structure. Factor I was the "level playing field." This factor showed a concern for fair treatment and performance evaluation. Factor II was the "resource and control" factor and focused on the principal's control of the resources and personnel in the school setting in which respondents worked.

Factor III was the “value added payoff.” Emphasis in this factor was on money or monetary related awards. Analysis of the study showed that Factor I and Factor II were very closely related. Factor III was not related to Factor I and II and was rejected as a necessary requisite to acceptance of the leadership role. The study supported Herzberg’s Two-Factor theory because money and organizational characteristics function as hygiene

Pillar (1991) in his study tested a hypothesis drawn from Herzberg’s motivation-hygiene theory. He focused on the extent to which motivator and hygiene factors existed among lay principals. Elementary and secondary principals were also compared in order to determine if there was a difference in the factors related to their job satisfaction or dissatisfaction. The sample was 211 lay principals of Catholic elementary and secondary schools in Michigan. The findings revealed that combined motivator factors had a tendency to contribute more to job satisfaction than combined hygiene factors. Combined hygiene factors appeared to contribute more to job dissatisfaction than combined motivator factors. There was not a statistical significant difference in combined factors identified with job satisfaction between elementary and secondary principals and there was not a statistically significant difference in combined factors identified with job dissatisfaction between elementary and secondary principals.

The purpose of Rasmussen study (1990) was to identify the factors perceived by middle school principals as contributing to their job satisfaction and job dissatisfaction. The design of the study was to apply Herzberg’s Two-Factor theory to middle grade principals to determine how work-related events caused satisfaction or dissatisfaction. Data were collected through interviews with selected participants. The sample was

selected by stratified random sample of 33 middle school principals in Los Angeles and Orange Counties. To collect data, a modified Herzberg's semi-structured interview was utilized. The study revealed that *responsibility, recognition, achievement, work itself, and advancement* are greater indicators of job satisfaction. The hygiene factors of *working conditions, status, interpersonal relations, company policy and administration, status, supervision, and job security* were the greatest indicators of job confidence.

Dissatisfaction with *company policy and administration* was significant at the 0.5 level. The motivator factors *advancement, possibility of growth, and responsibility* were not identified as either a motivator or as a hygiene factor. The hygiene factors *salary, job security, status* were not identified as either motivator or a hygiene factors. The *work itself* was identified as a motivator and also as a hygiene factors. No significant difference between the demographic factors and job satisfaction and job dissatisfaction. Intrinsic variables contributed to job satisfaction while extrinsic variables contributed to job dissatisfaction. The motivators contributed more often to job satisfaction than the hygiene factors, and hygiene factors more frequently contributed to job satisfaction. Thus, this study supported Herzberg's theory.

The purpose of Ashton (1989) study was to assess the overall job satisfaction of Connecticut middle school principals, to determine if any combination of job-related predictor variables, such as work on the present job, supervision, present pay, opportunities for promotion, and co-workers, contributed significantly to principals' job satisfaction, and to examine the predictor variables with respect to Frederic Herzberg's Two-Factor Theory of motivators and hygienes. The data were collected by a Job

Descriptive Index (JDI). The sample consisted of all 85 middle school principals. Two independent variables *work on the present job* and *present pay* were revealed as predictors of job satisfaction. *Work on the present job* explained 31.87% of the variance in the dependent variable of job satisfaction. *Present pay* accounted for 3.63% of variance. Both predictors were statistically significant at the 0.5 alpha level with p. values of .000 and .046. This investigation found that the hygiene factor *present pay* related significantly to the job satisfaction. The motivator *promotion opportunities*, which should contribute toward job satisfaction, was not a predictor in this study. The conclusion from the study was that middle school principals in Connecticut, on the basis of their score, appeared satisfied with their jobs and that two predictor variables, *work on the present job* and *present pay*, related significantly to job satisfaction. The study found only partial support for Herzberg's Two-Factor Theory.

O'Neal (1986) explored the perceptions of educational administrators regarding job characteristics. The respondents were asked to distinguish between job characteristics, which were personally satisfying, and job characteristics which motivated them to increase work performance. The demographic questions were also part of the questionnaire, which was developed and mailed to 317 educational administrators in a large school district in the Southwest. The findings showed that educational administrators did not distinguish between satisfaction and motivation. A subtle distinction did exist between motivation for personal satisfaction and motivation for performance of the job. There was little variance explained by three demographic

variables. Females appeared to be more satisfied than men in their jobs. The results showed that females were also more flexible in adapting to work demands than males.

The study of Wisher (1984) was focused to examine the relationship among motivation-hygiene factors perceived to be present in districts by principals' supervisors, and the levels of job satisfaction as expressed by principals. While superintendents were interviewed, the questionnaires were sent to all school principals in Riverside County school district. The findings of the study showed that except for job security, all motivation-hygiene factors were rated as average to the above priorities of implementation. The principals reported some satisfaction for each of the motivation-hygiene factors and overall. Demographic data didn't affect overall job satisfaction. The findings also revealed significant differences between the district's priority in implementation of the factors District Policy/Administration, Supervision/Technical Skill, and Job Security, and the level of principals' job satisfaction. Principals were generally satisfied with their jobs. District policy/administration, working conditions, interpersonal relations, and salary were suggested to enhance a principals' job satisfaction. The findings of the study did not support Herzberg's theory.

Surbida (1983) in her study used Herzberg's motivation-hygiene theory model of job satisfaction to examine job satisfaction or job dissatisfaction regarding the salaries of elementary principals in the San Gabriel Valley school districts in California. An additional purpose was to evaluate the relationship between principals' overall job satisfaction and the demographic variables of age and years as an administrator. The final purpose was to examine whether there were significant differences in overall job



satisfaction as a function of the demographic variables of sex and ethnic background of a subject. The data were collected through mailed questionnaires to all 296 elementary school principals. Findings of the study showed that there was not a significant relationship between principals' ages and overall job satisfaction and sex and overall job satisfaction. Minority principals were less satisfied with their jobs than white principals. The study revealed no significant relationship between the number of years served as a principal and ratings of subjects and overall job satisfaction. Dissatisfied principals proved too small a sample to conduct a meaningful analysis with respect to the salary variable. There were no significant relationships between salaries of principals and their levels of job satisfaction in the group of satisfied principals. Principals, overall, reported that they were satisfied with their jobs and with their salaries. The study partially supported Herzberg's Two-Factor theory.

The study of Friesen, Holdaway, and Rice (1983) examined job satisfaction of school principals with their work in Alberta, a Canadian province. The investigators concentrated on what aspects principals identified as contributing to their overall job satisfaction and overall dissatisfaction and to what extent did these aspects correspond to those obtained by Herzberg and other researchers. A questionnaire was used to collect the required data. The sample represented 350 school principals in Alberta. The findings revealed that principals with 20 or more years of experience chose hygiene factors more frequently as contributing to job satisfaction than to job dissatisfaction. Male principals identified hygiene factors more frequently as sources of dissatisfaction than females. Principals in city schools identified hygiene factors less frequently as sources of

dissatisfaction than principals from town and rural schools. Principals in large schools identified hygiene factors less frequently as sources of dissatisfaction than principals of smaller schools. As sources of their job satisfaction, principals identified sense of achievement, interpersonal relations, recognition and status, importance of the work, and relationships with the central office. Dissatisfiers as source of job dissatisfaction were administration and policies, amount of work, overall constraints, attitudes of society, physical context, stress, and impact on home life. Facets contributed to both satisfiers and dissatisfiers were relations with teachers, responsibility, autonomy, student attitudes and performance, challenge of work, and relationships with parents. The analysis of results showed that two general sets of job facets were identified as sources of satisfaction and dissatisfaction in the study, but these overlapped eight existing facets. Achievement, responsibility, and recognition were found as sources of overall satisfaction. Policy and administration, and working condition were found as sources of job dissatisfaction. These results agreed with those of Herzberg's study. Identifying recognition, achievement, responsibility, policies and administration, and working conditions as sources of satisfaction and dissatisfaction were approximately equivalent in Herzberg's research and in Friesen et al. study. Differences in interpersonal relationships, advancement, overall constraints, student attitudes and performance, attitudes of society, and stress differed in this study from Herzberg's results. Hygiene interpersonal relations were identified as a source of satisfaction. Motivator advancement was not identified as a source of satisfaction or dissatisfaction. Overall constraints, student attitudes and performance,

attitudes of society, and stress were identified as dissatisfiers, but were not apparent in Herzberg's research. The study only partially supported Herzberg's theory.

### Demographic Variables

#### Sex

The literature supporting job satisfaction and gender is divergent (Cole, 1940; Stockford & Kunze, 1950; Chase, 1951; Hulin & Smith, 1976; McCaslin & Mwangi, 1994). Herzberg in his book *Job Attitudes* (1957) described the situation as follows:

Twenty-one studies are reported on this problem. In six of these women are shown to be more satisfied than men; in three, women are less satisfied than men; and in five no differences between men and women emerges. Five other studies have no data comparing men and women, but they report surveys of women's job attitudes in which morale was found to be high. (p. 15)

Varca, Shaffer, and McCauley (1983), Freisen et al. (1983) found that male faculty members were more satisfied with their jobs than female faculty members. On the other hand, studies of Hodson (1989) and Kelly (1989) showed that female employees have increased job satisfaction over males. A study of Nestor and Leary (2000) about the relationship between tenure and non-tenure track status of extension faculty and job satisfaction revealed that there is no statistically significant relationship between gender and job satisfaction despite the fact that literature has indicated that there is a positive relationship, with female employees having higher job satisfaction (Friesen, Holdaway, & Rice, 1983; Hodson, 1989; Loscocco & Roschell, 1991).

The findings of Delgado (2001) about job satisfaction of high school principals revealed that males had significantly higher scores on perceptions of training opportunities and use of teams and less variance across all variables. Bryant's study

(2001) of factors influencing job satisfaction of principals in low-performing and exemplary schools showed that overall job satisfaction appeared to be related to age, but not gender. When male and female principals from school performance groups were compared separately in relation to their job satisfaction scores, there were significant differences. Gender was found as one of the variables to be a predictor from both principal groups. Neal (2002), in her study about job satisfaction of Florida's high school assistant principals, revealed that gender was not found to be a significant factor. Evans' study (2002) on job satisfaction of assistant principals in Philadelphia area high schools revealed little effect of gender to job satisfaction. Barry (2002) in his study about job satisfaction and leadership style of Michigan high school principals found that, in regard to job satisfaction, male high school principals tended to be more satisfied with their promotion ability than female principals, and principals in large schools had a higher satisfaction with promotion than those in smaller schools. Overall, male principals in the larger schools have greater job satisfaction than principals in small schools. Descriptive profiles in Brogan's (2002) study about job satisfaction of Idaho high school principals indicated a small level of difference among high school principals related to gender in general job satisfaction with males having marginally higher levels of general job satisfaction. Dill's study (1987) about Tennessee male and female secondary principals revealed that women worked most often in urban schools, while men in rural settings. Educational backgrounds of males and females did not differ significantly but women had the greater proportion of doctorate degrees. Women spent far more years in the classroom before entering into the principalship, and both genders most often cited the

assistant principalship as preliminary to the principalship. Female job satisfaction was extremely high.

The purpose of Phelan's study (1991) was to examine job inputs, job outputs, and the organizational commitment of 283 male and 283 female professional and managerial employees of a major U.S. corporation. The findings revealed that men had jobs with substantially higher salary grades and estimated salaries than women. Gender differences in educational attainment, years in the workforce, breaks in service, hours worked per a day, and frequency of working on weekends, in the evenings, and during lunch were minimal. Women had longer breaks in service from the organization and reported working more frequently in the evenings and during lunch. No other gender differences were found in job inputs. Two hypotheses were proposed to account for the "paradox of the contented female worker" (i.e., that women's job satisfaction is as high as men's even though their jobs pay less). The first hypothesis stated that employees would compare their outcome and inputs to those of same – sex colleagues and, consequently, that the relationship between equity scores and organizational commitment would be stronger for equity scores based on own-sex comparisons. Second, it was hypothesized that because women have lower personal entitlement standards, women (relative to men) would be significantly more committed to the organization than predicted on the basis of their equity scores. Neither hypothesis was confirmed.

The purpose of the study of Burke (1995) was to explore the perceptions of county elementary teachers regarding their satisfaction with selected characteristics and operational procedures of the Alberta school system where the teachers worked. Another

purpose was to develop profiles of the personal and professional characteristics of Canadian elementary teachers and to examine the relationship that exists between satisfaction and these characteristics. The findings revealed that overall job satisfaction was slightly associated with sex of teacher, length of residency, childhood residency, and consistency of assignment with training. Number of dependents, marital status, contract status, years of teaching in the present county, years of total teaching experience, and major teaching assignments were highly associated to overall job satisfaction.

Sutter (1994), in his study about job career satisfaction of secondary school assistant principals, surveyed 632 secondary school assistant principals in Ohio during the 1993-1994 school year. To collect data, he used the Minnesota Satisfaction Questionnaire. He found that the best predictor of job satisfaction was a model, which combined the participants' feelings of personal achievement on their jobs, beliefs about their chances of advancement, how they perceived that their abilities were utilized, and whether or not they aspired to become building principals. The model which combined their sex, their beliefs about their chances for advancement, their feelings of personal achievement on their jobs, and their thoughts about their school system's policies and practices was indicated by the secondary school assistant principals as the best predictor of career satisfaction. The assistant principals who were accomplishing much on the job reported a higher level of satisfaction than assistant principals who were accomplishing less. The assistant principals who wanted to be principals had a significantly higher level of job satisfaction than assistant principals who did not have such aspirations.

The study conducted by Jones (1990) about the relationship between the job satisfaction of secondary assistant principals and their perception of their principal's leadership behavior revealed that the demographic variables sex, length of service, race, and educational level had an insignificant effect upon the relationship between leadership behavior variables and the job satisfaction.

McElveen (1989) compared the job perceptions, job roles, job satisfaction, and career plans of more and less experienced secondary school assistant principals. The demographic data were sex, years of teaching experience, age, educational background, and salary. The study showed that the more experienced group of assistant principal was older, contained fewer females but more non-whites, had less teaching experience, and received higher salaries when compared with their less experienced counterparts.

Borquist (1987) studied job satisfaction of administrators in a public suburban school district. She found that sex group membership do not significantly relate to job satisfaction.

Miller (1985), in his study about secondary school principals in Minnesota and their job satisfaction, described the secondary principals of Minnesota. The secondary principalship is a male-dominated profession. Only 3.6% of the respondents were female. The respondents had an average of approximately 14 years of educational administrative experience and had been in their present position an average of eight years. The MSQ overall satisfaction mean score was 3.5 of a possible of 5. Intrinsic mean score (3.7) was significantly higher their extrinsic mean score (3.10). Despite the fact that there were significant differences between intrinsic and extrinsic mean scores, there was also a

significant correlation between these means scores. As the intrinsic mean increased, the extrinsic mean scores also increased. No significant relationship was found among sex, total years of educational administrative experience, years in present position, age, highest degree earned and any of the three satisfaction scores.

The study of Eckman (2000) focused on the experiences of women in high school principalship in terms of the challenges they face serving as high school principals, role conflicts they experience, their role commitment, and their job satisfaction. The majority of women had become principals in their mid to late 40s, were European-American, married and had children. A majority of them were employed in rural school districts, with only one high school job represented. Job satisfaction was negatively associated with role conflict. Role conflict, experienced in terms of time demands and presence of children at home, had an impact on career decisions. The size of the school contributed to job satisfaction. Job satisfaction increased as the size of the school increased, while it decreased as role conflict increased. Women's interest in the high school principalship was stimulated by mentoring and encouragement. Women also criticized the educational administrative programs because they did not take into account the gender issues associated with the high school principalship.

Eckman's study (2004) focused on the effect of gender, role conflict, role commitment, and job satisfaction on the high school principal. Data were collected from three Midwestern states. The findings of the study showed differences between female and male high school principals in their personal and professional attributes as well as in role conflict. Similarities were found between male and female high school principals



role commitment and job satisfaction. There was a significant difference in the number of years teaching experience for the female and male high school principals ( $t = 2.49$ ,  $df = 335$ ,  $p = .014$ , effect size = .26). The average number of years of teaching experience for the male high school principals was 11.37 (SD = 6.19, for female it was 13.11 years (SD = 6.72). The mean age for first principalship position for the men was 38.60 years (SD = 7.20), for women the mean was 42.10 years (SD = 6.88). Male principals had been in their current positions significantly longer than their female counterparts ( $t = 4.35$ ,  $d = 328$ ,  $p < .001$ , effect size = .47). The female principals were in their present positions on average of 4.32 years (SD=2.99), with 14 years being the maximum. The male principals were in their present positions for an average of 6.70 years (SD = 6.30), with 32 being the maximum number of years in the positions.

The participants used the Job Satisfaction Survey with a 4-point Likert-type scale. The degree of job satisfaction was from 1 (very dissatisfied) to 4 (very satisfied). The female principals scored on the job satisfaction survey on average 2.83 (SD = .38), while men scored on average 2.89 (SD = .34). No significant difference between the average response for female and male high school principals was found on the job satisfaction survey ( $t = 1.36$ ,  $df = 334$ ,  $p = .170$ ).

Harvey (2002), in his study about professional vitality and the principalship, found that passion emerged as the most resilient characteristic of professional vitality. Women showed higher passion, higher professional vitality, and less role conflict than men. Total experience in education, age, and support from faculty and staff were

associated with higher vitality and lower stress, while experience in the same school was associated with diminished passion and vigor and increased overload.

#### Years Served as a Principal and Years Served in Present School

The research about job satisfaction and years of experience has indicated that no relationship was found between those two variables (Bodeian, Farris & Kacmar, 1992). On the other hand, research studies of McCaslin and Mwangi (1994) found that overall job satisfaction increased with the years of experience.

Delgado (2001) researched job satisfaction of high school principals. This study revealed that principals' years of experience did not correlate significantly with job satisfaction. Bryant (2001) studied factors influencing job satisfaction of principals in low performing and exemplary schools. His findings revealed that years of experience was not related to general job satisfaction for principals from either school performance group. The study of Brady (2001) about job satisfaction of California principals revealed that two demographic factors, length of years as a principal and years in current position, were related to principals' perceived job satisfaction with job performance. As years in the position increased, so did the level of one's perceived performance. Brogan (2003) studied job satisfaction of Idaho high school principals and showed that the more experienced principals enjoyed higher levels of general job satisfaction.

Hardman, Leary, and Toth (1996) researched the job satisfaction of female public school administrators in West Virginia and revealed no significant differences between the means in any of the categories of the individual variables. The only significance resulted from the analysis of the relationships between tenure in the current position and

extrinsic job satisfaction. Higher levels of extrinsic job satisfaction with fewer years in the current position were reported by school administrators. The findings of the study showed that younger female principals had significantly higher extrinsic job satisfaction scores than older female principals.

Gould's study (1987) of the relationship between demographic characteristics and job satisfaction variables based on perceptions of selected Arkansas public school elementary principals revealed that demographic variables of sex, type of school, and number of years in present position were not related to job satisfaction. The motivators and hygiene factors did not form two separate sets of work variables, which contributed to job satisfaction, and job dissatisfaction of public elementary principals.

Chen (2000) looked at job satisfaction among high school assistant principals in the state of Mississippi and showed a high degree of general, intrinsic, and extrinsic job satisfaction among the assistant principals. Intrinsic satisfaction was high, with 75% of the assistant principals rating 11 of the 12 intrinsic statements as "satisfied" or "very satisfied." The degree of extrinsic satisfaction was not as high as the degree of intrinsic satisfaction. The study did not reveal the statistically significant relationship between job satisfaction and length of years worked as an assistant principal. No statistically significant relationship was found between working five years or less as an assistant principal and job satisfaction. Those principals who worked more years as assistant principals reported greater job satisfaction.

Harvey and France (1997) examined manifest needs of achievement, dominance autonomy, and affiliation of school administrators in relation to job satisfaction. The

sample consisted of 53 men and 48 women in graduate level administration courses at the University of Victoria. The median year of administrative experience was 7.6 years. A comparison of administrators' responses in the sub-scales by gender, age, years of teaching experience, and years of administrative experience revealed no significant differences, although there was a trend (3.15 up to 3.46), albeit marginal ( $.10 < -p < .15$ ), for manifest affiliation needs to increase with years of administrative experience.

The purpose of the study of Greska (2004) was to assess the level of job satisfaction of public middle school assistant principals in North Carolina. The results revealed that assistant principals were overall satisfied with their job in general. No significant relationships were revealed between overall job satisfaction, and number of years as an assistant principal, and other demographic variables.

Border (2004) studied job satisfaction of Florida's middle school assistant principals as a factor for preserving an administrative workforce. He revealed that tenure, or years of experience as assistant principals, was found to be negatively correlated with all six-facet scales: work, pay, promotion, supervision, people, and job in general (JIG). Personal variables showed no statistically significant difference between the mean JIG score of male and female respondents.

Bridges (1995) study focused on the statistical relationships and associations between the dependent variable of job satisfaction and the independent variables of years as an assistant principal, years experience as an educator, gender, age, level of education, assistant principals' perceptions of district support, annual income, district size, building size, and average hours worked per week of Arkansas secondary assistant principals.

From 10 variables, only three relationships were found to be statistically significant. These were age and job satisfaction, level of education and satisfaction, and perceptions of district support and job satisfaction.

A study of factors affecting job satisfaction among Arkansas secondary principals was done by Owen (1996). His study revealed that a statistical significance was found to exist between 5 of 10 factors when correlated with job satisfaction. These variables were years as an educator, income, level of education, district support, and age. Between those variables that showed statistical significance when measured using both the chi-square test of independence and the Spearman's rho correlation coefficient were years of experience as an educator, income, and district support.

The study of Degnan (1985) focused on critical incidents of job satisfaction and dissatisfaction of regional education attendance area (REAA) principals in Alaska. The study found that positive actions of students contributed to the satisfaction of both male and female principals, regardless of length in present position, length of residence in Alaska, or sex. The negative actions of district office personnel contributed to dissatisfaction of REAA principals, regardless of length in present position, length of residence in Alaska, or sex.

Ferrandino and Tirozzi (2003) in their article about middle school principals posited "Principals are older and have less experience as principals. Principals with 3 or fewer years experience have increased steadily over the past 20 years, while the percentage of principals with 10 or more years experience has declined in that same time period" (2003, p. 2).

### Type of School

The scant literature reporting the relations between principal satisfaction and level of school (elementary, middle, high) has been inconsistent (Friesen et. al., 1983; Johnson & Holdaway, 1990). Evans' study (2002) focused on the relationship between the career path and professional background characteristics of assistant principals in Philadelphia area high schools and job satisfaction. It showed that type of school has little effect on job satisfaction of assistant principals.

Steffen (1985), in his study about sources of organizational stress and the motivation-hygiene theory (stress variables, administrative characteristics, job satisfaction, work attitudes), determined if relationships existed between sources of organizational stress of elementary and secondary principals and their motivation to work. The study sample consisted of 73 elementary principals and 63 secondary principals, all from suburban Cook County, Illinois. Eight respondents were randomly selected for follow-up interviews. The findings of Steffen's study revealed that elementary and junior high school principals reported significantly higher frequencies of stressful incidents on the job than secondary principals. Most principals, regardless of school level, reported relatively low frequencies of stressful incidents. This results are in contradiction of the study of Else and Sodoma (1999) that revealed that 81, 9% of principals of all type of schools in Iowa felt considerable stress. Job stress for principals was more highly associated with a lack of hygiene factors than with a lack of motivators. The mean attitude score of elementary principals was significantly lower than that of high school principals. The lack of opportunity for professional and personal growth was a

more prevalent problem for elementary principals than it was for secondary principals. Lack of funding, supplies, and equipment was perceived to be more of a problem in suburban elementary schools than in suburban secondary schools. Job stress was negatively correlated with job attitude for both elementary and secondary principals in the sample.

The study of Holdaway and Johnson (1990) focused on perceptions of overall job satisfaction and facet satisfaction of elementary and junior high school principals in Alberta (Canada). Questionnaires were sent to 131 principals of elementary and 93 principals of junior high schools. The results of the study revealed that percentage frequency distributions of the levels of overall job satisfaction were similar for both elementary and secondary schools. Most principals expressed high or moderate satisfaction with their jobs as a whole. The highest means ranking for facet satisfaction scores for elementary principals were their working relationships with teachers, their relationship with students, the teaching competence of their teachers, the satisfaction and moral of their staff, and their sense of accomplishment as administrators. Highest ranking facets for junior high school principals were working relationship with teachers, their relationships with students, freedom to allocate teaching assignments, responsibility for formal teacher evaluation, and their relationships with central office staff other than superintendent. In spite of a similarity in ranking, several important differences were found. The highest mean satisfaction score for facets were found in principal's working relationships with teachers and students. A greater variety of responses and lower mean score were found for principal's occupation, working conditions, and role and

involvement in the district. Elementary and junior high school principals in interviews indicated similar facets that they gave them the most satisfaction and the most dissatisfaction. These were relationships, commitment, satisfaction, attitudes and growth. Junior high principals placed greater emphasis upon student achievement and growth. The most dissatisfying facets for elementary principals were conflict, non-cooperation, powerlessness, workload, capacity to innovate, lack of parents' interest, cutbacks associated with budgetary restraints, small school size, and educational priorities of the school district. Responses of the junior high school principals tended to cluster around poor motivation of some students and some staff, system decision-making and funding, bureaucratic procedures, and workload. Important rankings showed that working relationships with teachers and the teaching competence of teachers were ranked equally as number one for both groups. A sense of accomplishment as an administrator and attitudes of parents to school both ranked 4.5 (elementary) and 6.5 (junior high). The greatest differences in the most highly ranked of the 41 facet variables were for achievement of students (ranks 11 and 5) and successful competition of tasks and projects (10, 16). For the elementary principals, the lowest mean scores related to the principal's social position in the community (2.6 on the 4-point scale), the principal's social relationships with teachers (2.8), and opportunities for advancement as an administrator (3.10). The corresponding means for administrators were 2.9, 2.9, and 3.2. Junior high principals also had low mean scores for the principal's involvement in decision-making at the district level (3.1) and fringe benefits in the contract (3.20). The research found a moderate correlation between satisfaction with facets and perceptions of importance of



these facets for elementary principals (Spearman coefficient .52,  $p < .01$ ). The level of agreement between satisfaction and importance was even lower for junior high school principals (Spearman coefficient .39) than for elementary principals. Relationships between extreme responses revealed that the facets that were rated “extremely important” were not consistently assigned “highly satisfied” ratings. The percentages of highly satisfied with a facet for which elementary principals indicated an extremely important rating varied from 12.7 % (number of hours the principal is required to work) to 50.5 % (principal’s relationship with students). The range of high school principals was 5.9 % (principal’s salary) to 63.8 % (responsibility for formal evaluation of teachers). The association obtained for both groups of principals between selection of “extremely important for overall job satisfaction” and “highly satisfied” for each facet was only low to moderate.

The purposes of the study by Mack (2000) were to examine the factors that contributed to the job satisfaction of the principals in two metropolitan school districts and to identify specific perspectives of those principals related to job satisfaction. The relationship between job satisfaction and the factors as school type, gender, principals’ experience, degree attainment, school size, salary, and age were also assessed. The results revealed that principals, regardless of experience, gender, school type, degree attainment, school size, race, salary, and age, had similar views on what brought job satisfaction. Statistically significant were only areas of experience, race and degree. Principals indicated that the subscale Services to Others brought about the greatest satisfaction to principals while subscales of Practices, Advancement, and Salary brought the least

satisfaction. During personal interviews with elementary and middle school principals it was revealed that these principals would not want to enter the high school principalship. They considered extracurricular activities and stress as disruptive factors to their family life. On the other hand, elementary principals reported pressures to achievement test scores at all grades.

The study of Papa, Lankford, and Wyckoff (2002), "The Attributes and Career Path of Principals: Implications for Improving Policy," revealed that there is a little variation in the mobility of principals grouped by type of school, e.g. elementary, middle, and high school. However, some notable exceptions are found. Elementary school principals are more likely to remain in the same school while middle school principals are more likely to have an administrative position in the same district 6 six years later than are either elementary or high school principals. High school principals are more likely to take administrative positions in different districts within 6 years of their first principalship than are elementary or middle school principals. When principals do change the schools, most of them move to a school of the same type (p. 12).

### Leadership and Management

Leadership and management are not the same things. While leadership is focused on creating a vision for the future and inspiring others to achieve it, management focuses on planning and controlling the organization in order to maintain stability (Daft, 1999). Management is status quo oriented and assumes a highly stable environment (Ubben, Hughes, & Norris, 2004). The job of the manager is to keep things moving correctly according to the norm that has already been set (Argyris, 1982). On the other hand,

leadership is very different. Leaders go well beyond the status quo. Foster (1984) stated that leaders always have one face toward change. Bennis and Nanus (1985) offer a clever distinction between a manager and leader. "A manager does the *thing right*; a leader does the *right thing*" (p.21). Leaders are not born, they are made, and they are made by effort and hard work.

Thus, both leadership and management are important to organizations. The organizations need good management and good leadership, effective managers and effective leaders. While managers are concerned with shaping the structures and processes of the organization in order to produce desired results, leaders have a commitment or a vision and their role is to shape people around their commitment or vision (Lunnenburg & Orstein, 2000).

Studies have described the principalship as filled with conflict, with unsatisfying management requirements, and with long days and nights (Duke, 1988). Principals are required to perform a growing number of responsibilities but, as new responsibilities are added, other responsibilities are not deleted. (Sergiovanni, 2001; Portin, Shen, & Williams, 1998). The results of research at IEL (Else & Sodoma, 1999) showed that with more autonomy of schools and with increased responsibilities, principals are forced to devote most of their time to management of schools instead of educational leadership. Such a role is in conflict with expectations of society, which expects that principals will be institutional leaders with clear vision and will lead their schools to better results and to better student achievement (Else & Sodoma, 1999). This trend is not only a problem in America's schools but also a problem of schools in Australia, United Kingdom, and New

Zealand. Administrative work has increased substantially, competing with educational leadership for priority and taking more of a principal's time (Raham, 2003).

Women are unrepresented in American administration despite the enactment of equal opportunity legislation and the Women's Liberation Movement in the 1960s. In spite of the fact that three-fourths of America's public school teachers in 1990 were women, 34% of them were elementary principals, only 12% were in secondary principalship, and only 5% were superintendents. The times have changed, but many barriers confronting women in leadership and management position have not change (Pigford & Tonnsen, 1993). Contrasting between male and female administrators Shakeshaft 1989 explained:

The "average" women administrator is more likely to be older, of a different race, religion, and political party, to be unmarried, and from a more urban background than her male counterpart. She is more likely to hold liberal views, to be more supportive of women's rights, and to understand the issues of single parents and divorce more personally. (p. 17)

The difference in sex, years in position, and age, are not related to function of school management and leadership. Aggressiveness or assertiveness, "take charge" attitudes and rational analysis are associated with leadership qualities of men. Male leaders prefer working in vertical hierarchies and tend to be individualistic and competitive. In dealing with subordinates, they rely on the formal authority they have in organization. Despite the fact that women also demonstrate these qualities, research has found that, in general, women tend to be more concerned with inclusiveness, consensus building, caring, and participation (Daft, 1999). While male leaders may associate effective leadership with a top-down command-and-control process, women's interactive

leadership seems appropriate for the future of diversity and learning organizations. (Daft, 1999, p. 305)

Principals of schools, regardless of gender, are key forces in providing employees with job satisfaction. If teachers are not satisfied with their jobs, morale drops, absences increase, and principals are exposed to enormous pressures from subordinates, superiors, parents, school boards, and from all the community to provide quality education. If teachers are dissatisfied in their jobs, it is difficult for principals to share common vision, cooperation, and accept the change process (Bittel, Lester, Newstrom, 1990). Principals have to utilize all of their mastery to motivate the teachers. Verbal and nonverbal communication can motivate employees, so can intrinsic and extrinsic motivators. Participation of employees in the decision-making process and empowerment of teachers are symptoms of a healthy school. Good work has to be recognized and poor work has to be corrected if it is going to change (Hill, 1979). Goals of the organization must be conceivable, believable, controllable, measurable, and desirable (Catt & Miller, 1989). Satisfaction of teachers is not the main goal; it is a tool for better work productivity and better achievement of students.

#### Women in Leadership Positions

Current educational administrators should support, stimulate, and encourage qualified women to pursue administrative careers and to recruit minority principals. The research study at UNI IEL (1999) showed women were 28.5 % of total number of principals, while racial/ethnic groups in Iowa comprised 2.4 % of the principals.

Historical data on women principals has shown that women constituted 55% of elementary principals in 1928, 41% in 1948, 38% in 1958, 22, 4% in 1968, and 19, 6% in 1973 (Johnson, 1973). In 1979, women held 18% of elementary principal positions with a projected level of 11% in 1980. Data on women in high school principalship and superintendency were not consistently recorded in the first half of the 20<sup>th</sup> century (AASA, 1981).

In the 1970s and 1980s, the greatest number of women in educational administration occupied a central office position. The later research about the gender composition of principals in education shows that the proportion of female principals is low relative to that of female teachers (Bell & Chase, 1993; Biklen & Branningan, 1980; Riehl & Byrd, 1997). In 1999-2000, 44% of all public school principals in the United States were women, up from 35% in 1993-1994 and from 25% in 1987-1988. In 1999-2000, women made up 55% of public elementary school principals but just 21% of public high school principals (Gates et. al., 2003). Men still made up a majority of the secondary school principals in both the public and the private sector.

In spite of the fact that women have become an increasingly greater portion of the teaching force, the average male teacher is still much more likely than the average female teacher to become a principal (Riehl & Byrd, 1997). In 1999-2000, the number of women was substantially higher among new principals (those with three or fewer years of principal experience). Fifty-four percent of new principals were found to be women. One research study (Gates et al., 2003) found that women received comparable pay for comparable work in the public sector.

### Shortage of Principals

A survey administered by the National Association of Elementary School Principals (NAESP) and National Association of Secondary Principals (NASSP) found “there is cause for concern” regarding the shortage of qualified candidates for the principalship because, for those candidates, the responsibilities, stress, and time requirements do not match the rewards (Educational Research Service, 1998). The Educational Research Service (ERS), along with NAESP and NASSP, documents a growing shortage of qualified candidates mainly for high school principalship in nearly all school district in the United States. The shortage of principals continues (Tirozzi & Ferrandino, 2003; Rayfield & Diamantes, 2003).

The reason why the shortages are reported and principals are less and less satisfied in their jobs is the increasing time demand and stress in their jobs (IEL, 1999), salary/compensation insufficient compared to responsibility, too much time required, and job conditions too stressful (ERS, 2000) study. Other states are experiencing similar findings including Minnesota, Vermont (Steinberg, 2000), Ohio (Rayfield & Diamantes, 2003) and continue to search for solutions. About half of the nation’s principals are near retirement and over the next 5 years 55% of middle school and 47% of elementary schools will face shortages of qualified candidates (NAESP, NASSP, 1998). The US Department of Labor-Bureau for Labor statistics expects the need for school administrators to increase by 10-20% over the next 5 years (NAESP, NASSP, 1998).

In a study conducted by the Idaho Association of Secondary School Principals (1999), 53 out of 78 respondents, or 68%, felt there was a nationwide shortage of highly

qualified, certified applicants for the principalship and that recruiting activities should be conducted by the state associations (Brogan, 2003). Dealing with constant public criticism along with attitudes of disrespect and ingratitude from parents, students, and employees, public school administrators face daily challenges that often don't have satisfactory solutions (IEL Task Force, 2000). The press reports paint a picture of an exodus of principals, highlighting annual turnover rates as high as 20% among principals in several states e.g. Vermont, Washington, Kentucky, and Texas (Steinberg, 2000).

This literature review has shown that the issue of principal supply and demand is complex. Expected future research results will verify and, in fact, in many cases already verified a continuing shortage at the beginning of this century (IEL, 2000). Research also suggested that there are many persons certified to fill current vacancies who do not want to work as principals (Gates et al., 2003). These findings correspond to results of a research study that revealed that many principals in Iowa who hold endorsement don't want to enter the principalship (Behrens, 2003).

According to the Bureau of Labor Statistics (1996-1997), employment of education administrators is expected to grow about as fast as the average for all occupations through the year 2005, meaning that a 10 –20% increase is projected. Most job openings, particularly for principals and assistant principals, are likely to result from the need to replace administrators who retire. At a time when many people in the United States are working well into their 60s, a surprisingly small fraction (17%) of public school principals are over 55 (Gates et al., 2003). The research study at the Institute for Educational Leadership (1999) showed that over three-fourths (78.4%) of Iowa public



school principals fell between the ages of 41 and 60, with 18.3% below 40, and only a small number (3.2%) above 60. This number (78.4%) is very important because from this category principals will retire or leave their positions to find a job in business or within education.

### Reasons for Shortage

Experienced teachers are not seeking campus administrative positions for a number of reasons including insufficient pay, high levels of stress, the politics of the job, and the excessive work hours (Tirozzi & Ferrandino, 2003). Many teachers holding principal endorsement do not want to hold the position. Fenwick reported that nearly 47% of the nation's public school teachers hold master's degrees, many in educational leadership but they are not willing to enter the leadership because they perceive principals to be overworked, underpaid bureaucrats, tangled in a web of administrative, unionized teachers, uninvolved parents, and disintegrated students (Fenwick & Pierce, 2001). The work week is especially long for high school principals who report working well in excess of 60 hours per week.

The results of Principals Job Satisfaction and Shortage Surveys at Institution for Educational Leadership (1999) showed that the most important dissatisfiers in a principal's job are time demands (67.2%) and stress (38%). These results correspond with results of ERS (2000). The research at IEL (1999) also revealed that the reasons why principals consider quitting the principalship are lack of time to put balance in their life and stress. Fifty-two and a half percent of principals don't consider their principalship to be their final occupational goal. It is thought that they would try to change their job in the

near future. That 52.5% is a big number. It is necessary that colleges/universities, professional organizations, legislators, schools, communities, current superintendents, and boards of education have to join hands to make school leadership positions highly valued and respected positions with a high potential for success. Interviews conducted with principals during the early 1990s about why they considered quitting indicated their sources of dissatisfaction included policy and administration, the challenge of doing all the things that principals are expected to do, and the tendency for managerial concerns to supercede leadership functions (Fullan & Hargreaves, 1996).

These factors, along with the seemingly inequitable salaries for such demanding positions of leadership, are some of the negative elements which are perpetuating the belief that the principalship offers little or no job satisfaction (ERS, 2000).

When a current principal leave that position it is a loss to the organization. Unplanned turnover can cost as much as 3-5 times the annual salary of the individuals involved.

#### Current Efforts to Recruit Principals

With fewer teachers interested in becoming school administrators, the education community is considering more radical steps. Some states are looking at ways to redefine the principalship by dividing duties into those that are business-related and those that are education-related. Potter (2001) recommends, among other strategies, hiring recently retired principals to address the shortage. In Los Angeles, a threatened shortage of principals led the Los Angeles Unified School District to call on retired principals to temporarily fill the gaps (Sahagun, 2000). Because many educators retire before age of 60, the proper mix of salary and benefits may lure an experienced principal back to a

campus for a period of time. It is possible that many principals don't decide to retire for economical reasons. The results of research at IEL at UNI (1999) showed that with more autonomy of schools and with increased responsibilities principals are forced to devote most of their work time to management of schools instead of educational leadership.

Another controversial approach being discussed by some is hiring professionals with management experience outside of education to fill empty principal positions (Fenwick & Pierce, 2001). The chief concern with this strategy is offering school's chief instructional position to business managers who lack teaching experience. The survey research provided at Institute for Educational Leadership (1999) revealed that most educators viewed this solution more negatively because of different aspects of management in business organizations and educational institutions. A small number, 4.28% supported decisions about certification requirements to attract potential candidates for a principalship.

Recent research at IEL (1999) revealed strategies that are necessary to attract educators. The most frequently cited was an increase in salary while other suggestions included reduction on time demands, improvement in benefits, and an increase in support. Additional ideas proposed were to provide more contract protection, to improve preparation, and to redesign expectations. Other suggestions were to develop district policies and practices that support leadership capacity building and intensify recruitment of teachers to the principalship.

Policy makers at the national, state, and local levels have been working on ways to address perceived recruiting and retention challenges in various ways. Nationally, the

Council of Chief State School Officers (1996) has emphasized quality and preparation issues. They have been pushing for the adoption of a set of professional standards to link attributes of school administrators to improved student outcomes. The Education Testing Service (1996) has developed two assessments--one for principals and one for superintendents. Nine states and the District of Columbia require the first test as part of the licensure process for principals. The National Board for Professional Teaching Standards is spearheading an effort to create a system of advanced certification for school administrators based on the existing national teacher certification effort (Archer, 2002).

At the state level, there are proposals to change administration certification in hopes of attracting new people into the field by offering an “alternative route to certification” for those with a non-educational background. Some states are trying to improve the quality of training that principals receive or make it easier for people to acquire the training. For example, in 1984 the North Carolina General Assembly established the Principals’ Executive Program (PEP), a professional development program for principals, assistant principals, and other administrative personnel in North Carolina’s public schools.

At the local level, many districts, particularly large urban districts, are trying to facilitate recruiting by increasing the supply of people interested in and qualified for principals positions through mentoring programs (Colvin, 2000). Some districts, for example in New York City, have principal institutes that identify excellent teachers and encourage and prepare them to become successful school leaders (Crow, Mecklowitz, & Weekes, 1992).

One of the concerns is that schools are not able or will be not able in the near future to find well-qualified people for administrative positions. There is little information for evaluating the required qualities of school administrators in a systematic way. A database of principals' performance evaluations does not exist to allow performance trends to be tracked. For example, research study at IEL at UNI (1999) revealed that 33 % of Iowa principals are not evaluated by their superintendent annually, 10 % have never been evaluated by superintendent and 44 % ask teachers and 14 % ask parents for feedback on job performance. The efforts by the Education Testing Service and the Council of Chief State Officers (1996) to define and measure the required competencies of school administrators may make it possible to consider the questions of qualities of principals more fully in the future. The analyses that try to address the problems of quality look to certification as a measure, or they simply rely on superintendents or district hiring offices. As discussed by Roza, Hill, Celio, Harvey, and Wishon, (2003), certification and educational attainment are the characteristics emphasized by district officers, but they are poor proxies for the political and leadership skills superintendents claim principals need.

The empirical evidence based on perceptions of quality raises some cause for concern. Two-thirds of respondents to a 1998 survey of 3,000 elementary and middle school principals expressed concern about public education's ability to attract quality people to principalship in the future (Doud & Keller, 1998). A survey of superintendents about the hiring of principals (NAESP, NASSP, 1998) found that about half of the superintendents who had recently filled principal vacancies felt there was a shortage of

qualified candidates. However, the respondents also indicated satisfaction with the individuals they hired and reported that new principals had proved to be adequately prepared for the position.

### Summary

The literature review and related research reviewed were divided into five parts. The first part described the history of principalship, the history of job satisfaction, and definitions and measurements of job satisfaction. The second part focused on process and content theories of motivation, with the emphasis on Herzberg's Two-Factor Theory. The third part discussed job satisfaction of school principals and the demographic variables of sex, years served as principals, and type of school. Leadership and management and women in leadership positions were explained in the fourth part. The fifth part concentrated on the shortage of principals, analyzed the reasons for this shortage, and described current efforts to recruit persons the principalship.

Definitions of the principals' role and responsibilities have changed over time. With new accountabilities and responsibilities, the role of principals has changed and become demanding. A principal today is a key person in school improvement and school effectiveness.

Job satisfaction has been topic for many studies. Many authors and researchers from the last century contributed to our better understanding of job satisfaction. The literature review showed that there did not exist "one right" definition of job satisfaction. Many authors have tried to explain the phenomena of job satisfaction in different ways.

A lot of effort has been devoted to measuring satisfaction. Many scales to measure job satisfaction have been elaborated. These scales are still utilized in current research. Many researchers elaborated on their own scales to better measure job categories which are more closely related to the everyday work activities under investigation and that are more practical for their studies.

The content and process theories of motivation were also discussed in this chapter. Each group of theories explains the motivation from a different perspective. Despite the fact that some of these theories were developed more than 40 years ago, and although they were often criticized by some researchers, they are still widely utilized in educational research. Herzberg's theory was described in more detail. This theory has received much attention since its publication in 1959. Herzberg argued that the causes of job satisfaction and job dissatisfaction are separate and distinct. The factors contributed to job satisfaction were motivators, which are intrinsic to the job. On the other hand, hygiene factors contributed to job dissatisfaction and they are extrinsic to the job.

The review of the literature showed that there is not a systematic research effort to study job satisfaction of public school principals in the United States. Many current studies are doctoral dissertations. Without knowing the perceptions of principals about satisfaction and dissatisfaction with their work, school boards and legislators will not be able to help principals get rid off the barriers that inhibit their work and their effectiveness. We need to know more about how sex of the principals, years in the position, or type of school contributes to job satisfaction or dissatisfaction of principals. The review of the literature also confirmed the fact that some studies about principals'

job satisfaction supported Herzberg's Two-Factor Theory, partially supported his theory, while others did not support this theory. In other words, some studies showed that not only motivators contributed to job satisfaction, but also hygiene factors had positive effect on job satisfaction of school principals.

The question of leadership and management of schools has become more urgent. With more autonomy, many principals are forced to devote their time to management of their schools instead of educational leadership. This is in conflict with expectations of society. Unless school boards adjust the workload of principals, their salary, extracurricular activities, and decisions to hire and fire personnel, the problems in job satisfaction will continue to arise. As a consequence, hiring women into leadership positions, especially at the high school level, could be problematic.

Stress, time demands, nearly 60-hours week, bureaucracy, and insufficient salary are some of the principals' factors of dissatisfaction. As a consequence, they leave their positions. The shortage of principals is reported not only in Iowa but also in other states. School districts fight to attract and retain qualified candidates into principalship. Even so, many qualified candidates refuse to enter the principalship. Many districts are looking for new ways to attract and retain qualified leadership personnel. They tried to improve benefits, reduce workloads, find assistant principals, and increase support. However, unless there is more autonomy in personnel management, contract protection, and reevaluation of the workload and salary, it is difficult to expect better school results and better student achievement.



## CHAPTER 3

### DESIGN OF THE STUDY

The primary purpose of this study was to examine the job satisfaction of Iowa public school principals and contrast their current perceptions with the perceptions six years previously. Additional study allowed us to look at the current demographic components of Iowa public school principals as contrasted with the 1999 study. Further analysis examined the job satisfaction of Iowa public school principals based on sex, years served as a principal, years served in present school, and type of school. Finally, the study was intended to determine the relationship between job satisfaction and leadership and management tasks and whether a significant change was seen from the 1999 to the 2005 study in motivators and hygiene factors for principal job satisfaction as defined by Herzberg's theory. The Herzberg theory provided the theoretical framework for this study (Herzberg, Mausner, & Snyderman, 1959).

Chapter 3 contains the methods and procedures that were utilized to identify job satisfaction of Iowa public school principals. Discussion issues are contained under the following broad headings: (a) Methodology (b) Population and Sample, (c) Instrumentation, (d) Collection of Data, (e) Data Analysis, and (f) Summary.

#### Methodology

Descriptive studies are concerned primarily with determining *what is* (Borg & Gall, 1996). According to McMillan and Schumacher (1997), descriptive study is concerned primarily with determining *what is* or *what was* and reports things the way they *are* or *were*. Descriptive research provides researchers with very valuable data and

important information. This type of research describes the characteristics of a group of subjects. Two types of descriptive research exist in the literature. First is descriptive research that is focused on measuring the characteristics of a sample at one point in time. The second type is longitudinal research, in which a sample is followed over time. The researcher collects data from a sample of different points in time in order to study changes or continuity in the samples' characteristics (Borg & Gall, 1989). In this study, the trend study design was employed. The trend study is a type of longitudinal survey where information is collected at different points in time in order to study changes over time.

A descriptive survey was done in the form of a mail questionnaire mailed to individuals holding the K-12 endorsement. The survey method of research was selected because it provides a systematic data collection tool to reach many people (Salant & Dillman, 1994). It was also the most economical and expedient method for obtaining large amounts of data in a relatively short time.

#### Population and Sample

The population for the study was Iowa public elementary, middle, and high school principals. A list of individuals with Iowa K-12 endorsement who were employed in Iowa public schools as principals for K-12 schools in 1998-1999 was obtained from database of the Iowa Department of Education. The same process was used for the 2004-2005 studies. Both lists were checked to avoid omissions, duplicate entries, and other inaccuracies in order to avoid coverage error.

A sample is a set of respondents selected from a larger population for the purpose of survey (Salant & Dillman, 1994). In the 1999 study, all Iowa public school principals were contacted. A sample of 300 principals stratified by elementary, middle, and high schools were proportionally drawn against a population of principals in the 2005 study. These principals were asked to participate in the study and to complete the research instrument.

Where the design is referred to as a proportionate stratified sampling, a uniform fraction is used for all the strata. This results in a sample that mirror of the target population with respect to the stratifying variables. Each grouping of the stratifying variables constitutes the same proportion of the sample as it does of the total population.

Using a sample of 300 principals in the 2005 study was done for economic, material, and time reasons. A sample of 300 subjects was considered to be large enough to get good results. Salant and Dillman (1994) claim that for a study population with 250 members that we expect to be about evenly split on the characteristics of interest, we need a sample of 152 to make estimates with a sampling error of no more than  $\pm 5\%$ , at the 95% confidence level, if the sample split is 50/50. That means the population is relatively varied. For an 80/20 split we needed 124 members. With our sample of 300 we can estimate a sampling error of  $\pm 3\%$  at the 95% of confidence level.

#### Instrumentation

The study utilized a questionnaire with two main parts: a demographic profile of Iowa public school principals and a job satisfaction instrument. Putting the demographic data at the beginning of the survey was intended to provide the respondent with easy

questions to start the survey and reduces the likelihood of the respondents foregoing the demographic data if that page were placed at the end of the survey (Dillman, 2000). The instrument used in 2005 study was a modified version of the one used in 1999.

#### Questionnaire Used in 1999 Study

Salant and Dillman (1994) discussed four categories of questions used in survey research. Open-ended questions do not provide choices from which to select an answer. Instead, respondents must formulate an answer in their own words. Close-ended questions with ordered choices represent a gradation of a single concept. Close-ended questions with unordered response choices enable the respondents to evaluate each choice and select the one that best reflects their situation. In partially close-ended questions, the choices are unordered, and respondents have the possibility of creating their own responses. Close ended-questions enable respondents to choose the pre-specified response (Borg & Gall, 1989). Researchers in the 1999 study utilized all types of questions described above. For the 2005 study of job satisfaction closed-ended questions with an ordered choice were used. These questions tend to be quite specific and were used in order to get necessary information.

Part I of the 1999 questionnaire included questions regarding selected demographic characteristics: sex, age, years served as principal, racial/ethnic classification, current certified enrollment, highest academic degree, when they were considering retirement, and whether they had an Iowa Superintendent Certification. The respondents indicated their responses by selecting their choice. Part II included questions connected to the shortage of principals, factors which inhibited the effectiveness of

principals, issues of greatest urgency in schools, stress, increased responsibilities and accountabilities, and many others. This part contained close-ended questions, close-ended questions with ordered and unordered response choices, partially-closed questions, and open-ended questions. They were coded by researchers and entered in the computer for the next analysis. Part III included statements related to job satisfaction. Some of these questions were related to the job itself while others were related to job context. The respondents were asked to indicate their level of satisfaction or dissatisfaction by checking an item corresponding to one of the five categories:

- |   |                         |
|---|-------------------------|
| 1 | Very Satisfied          |
| 2 | Moderately Satisfied    |
| 3 | Neutral                 |
| 4 | Moderately Dissatisfied |
| 5 | Very Dissatisfied       |

The questionnaire for this study (see Appendix) was developed specifically after consulting surveys from several disciplines including education and management (Camman et al., 1979; Weis, et. al., 1967; Smith, Kendal, & Hulin, 1969; Hackman & Oldham, 1975; Spector, 1985; Ironson et al., 1989; Doud & Keller, 1998).

The researchers of the 1999 study decided to develop their own instrument to include a separate set of job categories related to the everyday work activities under investigation for the study of Iowa public school principals. Spector (1997) stated that the major disadvantage of using an existing scale is that it will be limited to only those facets that the developers chose to place in their instrument. He explained:

The facets of most scales tend to be general, which makes them applicable to most organizations. They will not include more specific areas of satisfaction or dissatisfaction that are issues for certain types of organizations or a particular organization. These could include satisfaction with the specific decisions, events, individuals, or policies. (p. 7)

The factors included in the questionnaire were related to the job itself and were represented by Herzberg's motivators as recognition, responsibility, and work itself.

Hygiene factors were related to job context and were represented by the categories school policy and administration, personal life, interpersonal relations with peers, interpersonal relations with superiors, interpersonal relations with subordinates, interpersonal relations with parents, and salary.

The questionnaire was piloted to assess how much time the respondents needed to complete the questionnaire, in addition clarity and the ease of responding to the questionnaire. The questionnaire was modified in form and content after recommendations from a group of Iowa public school principals and UNI professors to assure the validity of the instrument.

Cronbach's Alpha reliability coefficient of internal consistency for all job satisfaction questions was .870 in the 1999 study versus .891 in the 2005 study. A widely accepted minimum standard for internal consistency is .70 (Nunnally, 1978).

Cronbach's alpha is designed to measure internal consistency. This means whether all items within the instrument measure the same thing. Alpha typically varies between 0 and 1. The closer the alpha is to 1.00, the greater is the internal consistency of items in the instrument. Negative values are possible and they indicate a scale in which some items measure the opposite of what other items measure. Cronbach's alpha

coefficients were calculated in order to ascertain the degree of internal consistency exhibited by the instrument. Examination of the reliability analysis indicated that the instrument exhibited moderate to strong internal consistency. The overall alpha coefficient was equal to .870 and was comparable with other instruments used in educational settings.

Seventy-six percent of Iowa principals responded in 1999. The questions measuring the job satisfaction in the 1999 were:

1. The sense of accomplishment you receive from your work.
2. Professional growth opportunities for you.
3. The adequacy of administrative support provided for you.
4. The adequacy of support services provided for you.
5. Community demands placed on you as a principal.
6. Extracurricular demands placed on you as a principal.
7. Time available for activities that put balance in your life.
8. Relations with the administrative team/cabinet.
9. Relations with the board of education.
10. Relations with the parents of your school.
11. Relations with the teachers of your school.
12. The consistency of the board in making decisions in the best interest of students.
13. How well the board of education acknowledges your accomplishments.
14. Your annual salary.
15. The community's image of school administrators.

16. Time spent on management tasks, i.e. budgeting, staffing, planning.
17. Time spent on leadership tasks, i.e. facilitating development of shared vision for the school, etc.
18. The quality of your relationship with the superintendent.
19. The process the superintendent uses to evaluate you.
20. All things considered, indicate your overall level of job satisfaction.

#### Questionnaire Used in 2005 Study

The survey questionnaire developed in 1999 was modified and shortened for the 2005 study. Part I was partially modified and shortened. Part II was not included in the 2005 study. The job satisfaction questions in Part III were included in the study without changes. One question added was “To what extent has No Child Left Behind Act impacted the roles of principals?”

The first part of the questionnaire was composed of selected demographic variables that were part of the research questions. They included: Sex: refers to the sex of the respondents. This variable was measured by asking respondents to select “male” or “female.” Years you have served as principal total and in current school: refers to the number of years experience as an elementary, middle, or high school principal. These variables were measured by asking respondents to select from a range of given figures which indicated number of years they have been principals.

Type of public school: refers to the elementary, middle/junior high, or high school where principal is in a principal position. Elementary school is any school consisting of grades through K-5 or K-6. Middle school is any school consisting of grades through 5-9, or 6-9.



Junior high school is any school consisting of grades 6-9, usually grades 7-8. High school is any school consisting of grades 9-12 or grades 10-12.

Other demographic variables of age, race/ethnic composition, and current enrollment were not a part of the research questions. They served only for comparison between the 1999 and 2005 studies.

The questions about job satisfaction were the second part of questionnaire and assessed 20 factors related to the job itself, to job context, and to overall job satisfaction of Iowa public school principals. Because of the comparison of 1999 results and 2005 results, the questions developed for the 1999 survey also used in the 2005 study. The format of a Likert-type scale (1932) was used to measure job satisfaction and job dissatisfaction. A Likert scale asks individuals to check their level of agreement with various statements. It is a common type of attitude scale (Borg & Gall, 1989).

Motivators (satisfiers) related to the job itself were:

1. The sense of accomplishment you receive from your work. (Recognition)
2. Professional growth opportunities for you. (Professional growth)
3. Community demands placed on you as a principal. (Work itself)
4. Extracurricular demands placed on you as a principal. (Work itself)
5. How well the board of education acknowledges your accomplishments.  
(Recognition)
6. The community's image of school administrators. (Recognition)
7. Time spent on management tasks, i.e. budgeting, staffing, and planning. (Work itself)

8. Time spent on leadership tasks, i.e. facilitating development of shared vision for the school, etc. (Work itself)
9. The process the superintendent uses to evaluate you. (Recognition)

Hygiene factors (dissatisfiers) related to job context were:

1. The adequacy of administrative support provided for you. (Status)
2. The adequacy of support services provided for you. (School policy and administration)
3. Time available for activities that put balance in your life. (Personal life)
4. Relations with the administrative team/cabinet. (Interpersonal relations-peers)
5. Relations with the board of education. (Interpersonal relations-superiors)
6. Relations with the parents of your school. (Interpersonal relations)
7. Relations with the teachers of your school. (Interpersonal relations-subordinates)
8. The consistency of the board in making decisions in the best interest of students. (School policy and administration)
9. Your annual salary. (Salary)
10. The quality of your relationship with the superintendent. (Interpersonal relations-superiors)

Herzberg's categories are:

Motivators: achievement, recognition, work itself, responsibility, advancement, possibility of growth.

Hygiene factors: supervision, company policy and administration, working conditions, interpersonal relationships with peers, interpersonal relationships with

subordinates, interpersonal relationships with superiors, status, job security, salary, effect on personal life.

The last part of the questionnaire included questions about the NCHLB Act to get information about the extent that this act has had on the roles of principals.

### Collection of Data

In March 1999, the questionnaires were mailed to all Iowa public elementary, middle/junior high, and high public school principals. Each one contained a brief letter of introduction and explanation, demographic and job satisfaction questions, and a self-addressed, stamped return envelope. The respondents were assured of confidentiality in the compilation of results. Ethical surveying means that the researcher does his/her absolute best to ensure confidentiality (Salant & Dillman, 1994). The individual's identity and that of each principal's school was used only to monitor the return of questionnaires and not in the analysis and reporting of data. All data collected were studied as group data. The answers were entered on a computer without names, addresses, or any means of identification.

The same process was utilized in the 2005 research study. The questionnaires with a cover letter, handwritten signature, and a business-size, stamped return envelopes were sent to all respondents. About two weeks after the questionnaires were sent, a follow-up letter was sent to members of the sample to thank those who had already responded and to remind those who had not. This included personalized cover letter with a handwritten signature, questionnaire, and preaddressed return, stamped envelope.

In order to avoid non-response error, late respondents (14.9%) were compared with respondents in order to obtain information about the differences of the groups. No significant differences were found between these two groups of principals.

Respondents marked their responses directly on the questionnaire. Any time researchers ask people to participate in a survey, it is the researchers' responsibility to respect both participants' privacy and the voluntary nature of their involvement (Salant & Dillman, 1994). In the 2005 study the respondents were also assured of confidentiality in the compilation of results. Confidentiality means that despite the fact that the researcher could associate responses with particular people he did not do so. The individual identity of each principal and the school was used only to monitor the return of questionnaires and was not identified in the analysis and reporting data. All data collected were studied as group data. The answers were put on a computer without names, addresses, or any means of identification.

#### Data Analysis

All data were analyzed by the researcher with SPSS, a statistical software program. Overall job satisfaction, satisfaction related to the job itself, and job context were described by descriptive statistics including numbers and percentages, means, and standard deviations. The analysis of the demographic data to overall job satisfaction was provided by *t*-tests, analysis of variance (ANOVA), and Scheffé post hoc tests. Correlations were calculated to describe the relationship or strength of association among overall job satisfaction, educational leadership activities, and management tasks.

### Summary

This chapter describes in detail the purpose and the step-by-step procedure of the study. A survey questionnaire was used to collect necessary data about job satisfaction of Iowa public school principals. The questionnaires were reviewed and a pilot study was described. The method of selecting the sample and the criteria used to categorize respondents was also described. The procedures of data collection and data treatment were detailed. Descriptive and inferential statistics were used in data analysis.

The goal of this study was not to test the dual continuum hypothesis. The researcher hoped that final results showed whether there was a significant change from the 1999 to the 2005 study in motivators and hygiene factors for principals' job satisfaction as defined by Herzberg's Two-Factor Theory.

## CHAPTER 4

### ANALYSIS OF DATA

The purpose of this chapter is to present the analysis of data which were collected in the 1999 and 2005 studies of Iowa public school principals' job satisfaction. The research population is described in the demographic information that was part of the survey. The demographic variables were (a) sex), (b) years served as principal, (c) years served in present school, and (d) type of school. Data are provided related to the level of job satisfaction as measured by the questionnaire. Findings are reported in narrative form and are also illustrated with tables.

The first part of this chapter describes the characteristics of the respondents in the 1999 study with a frequency distribution of the demographic data. This information includes data related to the respondents' overall return rate. Iowa questionnaire scale analysis is also reported. The chapter presents the findings of the 1999 study using range of scores, levels of job satisfaction, independent *t*- tests, and one-way ANOVA. Each research question is analyzed and tabulated. The Statistical Package for the Social Sciences – Version 11.0 was used for data analysis.

The second part of the chapter describes the characteristics of the respondents in 2005 study with a frequency distribution of the demographic data followed by research questions that guided this study. The findings of research questions for the 2005 study are analyzed and tabulated.

The third part of the chapter compares results of the 1999 and 2005 study.

### Characteristics of Respondents – 1999 Study

The population for the 1999 study was all principals from Iowa public elementary, middle/junior high, and high schools. In the 1999 study all Iowa elementary, middle/junior high, and high public school principals were contacted to participate in this study. The list of persons with K-12 principal endorsement who were employed as principals in Iowa public K-12 schools was obtained from the database of the Iowa Department of Education. The list of principals was checked to avoid omission, duplicate entries, and other inaccuracies to avoid coverage errors. Seventy-six percent of the principals responded in 1999.

The majority of the respondents in the 1999 study were male (71.5%). Over three-fourths (78.5%) fell between the ages of 41 and 60, with 18.3 % below 40 and only a small number (3.2%) above 60. The majority (52.6%) of the respondents had served as a principal for 1 to 10 years and about one-third had served 11 to 20 years. Fifteen percent served 21-30 years and 3.1% served more than 30 years. Considering only their experience in their present school, approximately half (54.1%) had served 5 years, 22.8% had served 6 to 10 years, and 23.1% had served more than 10 years. Of the respondents, 50.2% were employed in elementary schools, 17.7% in middle/junior high schools, and 31.7% in high schools.

Table 1

*Demographic Characteristics of Respondents*

Characteristics	Number	Percentage
<b>Sex</b>		
Male	638	71.5
Female	254	28.5
Total	892	100.0
<b>Years served as principal</b>		
1-5	278	31.2
6-10	191	21.4
11-15	168	18.8
16-20	93	10.5
21-25	68	7.6
26-30	66	7.4
31+	28	3.1
Total	892	100.0
<b>Years in present school</b>		
1-5	484	54.1
6-10	204	22.8
11+	206	23.1
Total	894	100.0
<b>Type of school</b>		
Elementary	449	50.2
Middle/Junior High	158	17.7
High	287	32.1
Total	894	100.0



### Iowa Questionnaire Scale Analysis

The Iowa questionnaire scale analysis contains 19 items that measure specific factors of job satisfaction with one question intended to measure overall job satisfaction. Often facet scales are used to assess general satisfaction by summing all of the individual facet scores. However, this is not the case in this study because each facet does not have the same importance for every individual, and the sum of these facets does not express the level of overall satisfaction. Rather, the sum expresses satisfaction with special aspects of the job (Ironson et al., 1989). The respondents were asked to indicate their level of satisfaction or dissatisfaction by checking an item corresponding to one of the five categories on a 5-point Likert scale: 1 (*very satisfied*), 2 (*moderately satisfied*), 3 (*neutral*), 4 (*moderately dissatisfied*), 5 (*very dissatisfied*). In order to ensure internal consistency of the instrument, the reliability coefficient was computed. The Chronbach's Alpha coefficient instrument for satisfaction had an internal consistency of 0.870. That means the instrument had reliability comparable with other instruments used in educational research. The widely accepted minimum standard for internal consistency is .70 (Nunnally, 1978).

### Research Question 1

What is the overall level of job satisfaction of Iowa public school principals?

The overall mean (*M*) of job satisfaction for 76% of respondents in the 1999 study was 2.04, with a standard deviation of .796. The mean fell within the *moderately satisfied* range on the scale.

Sub-Question a: What is the overall level of job satisfaction according to sex, years served as a principal, years served as principal in present school, and type of school?

The number of respondents ( $N$ ), the mean ( $M$ ), and standard deviation ( $SD$ ) for each group are shown in Table 2.

The highest overall satisfaction scores were observed for female principals ( $M = 1.94$ ,  $SD = .726$ ), for principals who had served 26-30 years in the principalship ( $M = 1.86$ ,  $SD = .560$ ), for principals serving 11 and more years in their present school ( $M = 2.00$ ,  $SD = .827$ ), and for principals from elementary schools ( $M = 1.98$ ,  $SD = .786$ ). Three of these highest scores fell within the *very satisfied* range (1.00 – 1.99) on the questionnaire scale. One of these highest scores fell within the 2.00 – 2.99 range indicating that principals were *moderately satisfied*.

The lowest overall satisfaction scores were observed for male principals ( $M = 2.08$ ,  $SD = .819$ ), for principals who had served 11-15 years in the principalship ( $M = 2.18$ ,  $SD = .801$ ), for principals serving in their present school 1-5 years ( $M = 2.06$ ,  $SD = .783$ ), and for middle/junior high principals ( $M = 2.11$ ,  $SD = .795$ ). The lowest overall satisfaction scores fell within *moderately satisfied* range (2.00-2.99) on the questionnaire.

The independent  $t$ -test indicated a statistically significant difference,  $t(887) = 2.644$ ,  $p < .008$ , in overall job satisfaction between males ( $M = 2.08$ ) and females ( $M = 1.94$ ), with a small effect size  $d = .17$ . Female principals appear to have been significantly more satisfied with overall job satisfaction than male principals.

Table 2

*Analyses of Variance for Overall Job Satisfaction by Years Served as a Principal*

Years served as a principal	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	278	2.04	.759		
6-10	191	2.03	.827		
11-15	167	2.18	.801		
15-20	93	2.11	.902		
21-25	68	1.90	.794		
26-30	64	1.86	.560		
31+	28	1.89	.916		
	889	2.04	.797	2.058	.056

The results of a one-way ANOVA are reported in Table 2. The analysis of variance indicated no statistical significance between years served as a principal and overall job satisfaction  $F(6, 881) = 2.058, p > .05$ . These results indicated that the overall job satisfaction is unaffected by years served in the principalship.

The results of a one-way ANOVA are reported in Table 3. The analysis of variance indicated no significant difference between years served in present school and overall job satisfaction  $F(2,888) = .450, p > .05$ . These data indicated that overall job satisfaction is unaffected by years served in present school.

Table 3

*Analysis of Variance for Overall Job Satisfaction by Years Served in Present School*

Years served in present school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	483	2.06	.783		
6-10	204	2.05	.795		
11+	204	2.00	.827		
Total	891	2.04	.796	.450	.638

Table 4

*Analysis of Variance for Overall Job Satisfaction by Type of School*

Type of school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Elementary	446	1.98	.786		
Middle/Junior High	158	2.11	.795		
High	287	2.10	.807		
Total	891	2.04	.796	2.699	.068

The results of a one-way ANOVA are reported in Table 4. Analysis of variance indicated no significant difference between type of school and overall job satisfaction,  $F(2, 889) = 2.699, p > .05$ . These results indicated that overall job satisfaction is unaffected by type of school.

Sub-Question b: What is the level of job satisfaction on each of the 20 factors for Iowa public school principals?

The top three ranked levels of satisfaction were (a) relationship with the teachers of your school ( $M = 1.62, SD = .687$ ), (b) sense of accomplishment you receive from your work ( $M = 1.73, SD = .706$ ), (c) relations with the parents of your school ( $M = 1.74, SD = .666$ ). The mean scores of these factors fell within the *very satisfied* range on the questionnaire scale (1.00-1.99). Principals felt that the relationship with the teachers, sense of accomplishment for their work, and their relationship with parents and with administrative team/cabinet were good. This fact contributes to the mutual understanding of the needs of the school and to good communication among principals, teachers and parents. The relationship with the superintendent was also on a very good level. This was

significant because principals who trust in abilities of their superintendent can work mutually to solve district problems.

The three lowest factors were (a) time available for activities that put balance in your life ( $M = 3.68$ ,  $SD = 1.087$ ), (b) time spent on leadership activities ( $M = 3.17$ ,  $SD = 1.050$ ), and (c) time spent on management tasks ( $M = 3.13$ ,  $SD = .985$ ). The mean scores of these factors fell within the *neutral* range on questionnaire scale (3.00-3.99).

Bureaucracy, lots of paper work, adding accountabilities, and many extracurricular activities seem to be why principals felt overwhelmed in their effort to work effectively and productively.

Table 5

*Job Satisfaction Factors*

Factors	<i>N</i>	<i>M</i>	<i>SD</i>
1. The sense of accomplishment you receive from your work.	890	1.73	.706
2. Professional growth opportunities for you.	890	2.13	.943
3. The adequacy of administrative support provided for you.	891	2.21	1.095
4. The adequacy of support services provided for you.	888	2.47	.943
5. Community demands placed on as a principal.	892	2.63	.976
6. Extra-curricular demands placed on you as a principal.	891	3.07	1.111
7. Time available for activities that put balance in your life.	890	3.68	1.087

(table continues)

Factors	<i>N</i>	<i>M</i>	<i>SD</i>
8. Relationship with the administrative team/cabinet.	892	1.89	1.032
9. Relationship with the board of education.	887	2.11	1.079
10. Relationship with the parents of your school.	891	1.74	.666
11. Relationship with the teachers of your school.	891	1.62	.687
12. The consistency of the board in making decisions in the best interest of students.	892	2.31	1.139
13. How well the board of education acknowledges your accomplishments.	891	2.72	1.212
14. Your annual salary.	891	2.97	1.181
15. The community's image of school administrator.	891	2.65	1.023
16. Time spent on management tasks, i.e. budgeting, staffing, planning.	892	3.13	.985
17. Time spent on leadership activities i.e. facilitating development of shared vision for the school, etc.	892	3.17	1.050
18. The quality of your relationship with the superintendent.	886	1.89	1.103
19. The process superintendent uses to evaluate you.	879	2.46	1.182
20. All things considered, indicate your overall level of job satisfaction.	891	2.04	.796

Note: No response for some items.

“Sub-Question c: What is the satisfaction level for each of the 20 factors according to sex of principal, years served as a principal, years served in present school, and type of school?

To answer this question it was necessary to analyze each of the 20 factors of the Iowa questionnaire against each of the demographic variables. The results were tabulated and labeled. Each of the tables shows demographic variables, the number ( $N$ ) of respondents for each group, the means ( $M$ ), the standard deviation ( $SD$ ) for each group,  $t$ -values,  $F$  ratio ( $F$ ), and significance ( $p$ ) for each variable. If it was necessary, a post hoc test followed each table in order to identify groups that differed.

The independent  $t$ -test was used to test sex as a demographic variable. The  $t$ -test was used to analyze whether the proportion in one category was different from the proportion in another category (Fraenkel & Wallen, 2000). In other words, a  $t$ -test compared the means of two distributions for some variables in which there was no overlap of membership in the two groups being measured. An independent  $t$ -test was performed to determine differences between sex scores. The results of the independent  $t$ -test are provided in narrative form.

A one-way-analysis of variance ANOVA was conducted to test significant differences between groups of means regarding principals' total years served as principals, the principals' years served in present school, and the type of school. ANOVA  $F$  test of significance was necessary to evaluate whether mean scores of the tested groups differed significantly from each other. ANOVA  $F$  test was more suitable for determining significance than performing a multiple  $t$ -test of significance. A  $p$  value of less than .05 was chosen as the level of significance for one-way ANOVA. A risk level of 5% is used in much educational and social research (Bieger & Gerlach, 1996). It means that

researcher is willing to take a risk of being wrong as an acceptable probability of reporting false (Type I error) results.

Where  $F$  test results were significant, Scheffé post hoc tests were conducted in order to identify groups, which differed. Cohen's  $d$  effect size (1977) was also computed as an indicator of how strong and how important the results were.

Factor 1. Sense of accomplishment you receive from your work.

The highest satisfaction scores for these factors were observed for female principals ( $M = 1.59$ ,  $SD = .575$ ), for principals who served more than 31 years in the principalship ( $M = 1.50$ ,  $SD = .509$ ), for principals serving 11 and more years in their present school ( $M = 1.63$ ,  $SD = .678$ ), and for elementary school principals ( $M = 1.64$ ,  $SD = .698$ ). All of the highest scores fell within the *very satisfied* range on the questionnaire (1.00-1.99).

The lowest satisfaction mean scores were observed for male principals ( $M = 1.78$ ,  $SD = .745$ ), for principals who served 1-5 years in the principalship ( $M = 1.79$ ,  $SD = .736$ ), for principals serving 1-5 years in their present school ( $M = 1.80$ ,  $SD = .757$ ), and for high school principals ( $M = 1.83$ ,  $SD = .743$ ). All of these scores also fell within the *very satisfied* range (1.00-1.99).

The independent  $t$ -test indicated a statistically significant difference,  $t(886) = 3.719$ ,  $p < .001$ , for the sense of accomplishment between males ( $M = 1.78$ ,  $SD = .745$ ) and females ( $M = 1.59$ ,  $SD = .575$ ), with a small effect size  $d = .26$ . Females ( $M = 1.59$ ) seem to have been more satisfied with the sense of accomplishment principals receive from their work than males ( $M = 1.78$ ).



Table 6

*Analysis of Variance for the Sense of Accomplishment Principal Receives from Work by Years Served as a Principal*

Years served as a principal	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	278	1.79	.736		
6-10	189	1.77	.689		
11-15	168	1.73	.730		
16-20	93	1.63	.656		
21-15	68	1.62	.647		
26-30	64	1.66	.739		
31+	28	1.50	.509		
Total	888	1.73	.706	1.653	.130

The results of a one-way ANOVA are reported in Table 6. The analysis of variance indicated no significant difference for years served as a principal and the sense of accomplishment principals receive from their work  $F(6, 881) = 1.635, p > .05$ . These results indicated that job satisfaction with a sense of accomplishment for the principal's work is unaffected by years served in the principalship.

Table 7

*Analysis of Variance for the Sense of Accomplishment Principal Receives from Work by Years Served in Present School*

Years served in present school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	483	1.80	.757		
6-10	202	1.65	.581		
11+	205	1.63	.678		
Total	890	1.73	.706	5.495	.004*

\* The mean is significant at the .05 levels (2-tailed).

The results of a one-way ANOVA are reported in Table 7. The analysis of variance indicated statistically significant differences between years served in present school and the sense of accomplishment principals receive from their work ( $F(2, 887) = 5.495, p < .05$ ). A Scheffé post hoc test indicated significant differences between means of principals who served 1-5 years and principals who served more than 11 years ( $p = .017$ ), with a small effect size  $d = .23$ . Principals who served in present school 1-5 years ( $M = 1.90$ ) appeared to less satisfied with the sense of accomplishment received from their work than principals who served more than 11 years ( $M = 1.63$ ).

The results of a one-way ANOVA are reported in Table 8. The analysis of variance indicated significant differences for type of school  $F(2, 887), = 6.978, p < .001$ .

Table 8

*Analysis of Variance for the Sense of Accomplishment Principal Receives from Work by Type of School*

Type of school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Elementary	445	1.64	.698		
Middle/Junior High	158	1.77	.627		
High	287	1.83	.743		
Total	890	1.73	.706	6.978	.001**

\*\*The mean is significant at .001 level (2-tailed).

The Scheffé post hoc test indicated that the means between elementary and high school principals differed significantly ( $p = .001$ ), with a small effect size  $d = .26$ . Principals of high schools ( $M = 1.83$ ) appeared to have been less satisfied with the sense of accomplishment they received from their work than elementary principals ( $M = 1.64$ ).

Factor 2. Professional growth opportunities for you.

The highest satisfaction scores were observed for female principals ( $M = 1.90$ ,  $SD = .914$ ), for principals who served more than 31 years in the principalship ( $M = 1.89$ ,  $SD = .956$ ), for principals serving in their present schools 6-10 years ( $M = 2.06$ ,  $SD = .899$ ), and for principals of elementary schools ( $M = 2.04$ ,  $SD = .946$ ). All of these highest scores were within the 1.99 and 2.99 range, indicating that the principals were *very satisfied* and *moderately satisfied* with the professional growth opportunities.

The lowest mean scores were observed for male principals ( $M = 2.23$ ,  $SD = .940$ ), for principals who served 11-15 years in the principalship ( $M = 2.17$ ,  $SD = .918$ ), for principals serving in present school 1-5 years ( $M = 2.18$ ,  $SD = .984$ ), and for high school principals ( $M = 2.26$ ,  $SD = .951$ ). All of these lowest scores fell within 2.00 and 2.99 range indicating that principals felt *moderately satisfied* with the opportunities for the professional growth.

The independent  $t$ -test indicated a statistically significant difference,  $t(886) = 4.776$ ,  $p < .001$ , for professional growth opportunities between males (mean = 2.23) and females (mean = 1.90), with a small effect size  $d = .36$ . Females ( $M = 1.90$ ) appeared to have been significantly more satisfied than males ( $M = 2.23$ ).

The analysis of variance indicated no statistical significance between years served as a principal and professional growth opportunities  $F(6, 881) = .399$ ,  $p > .05$ . The results of a one-way ANOVA are reported in Table 9. These data indicated that job satisfaction with professional growth opportunities was unaffected by years served in the principalship.

Table 9

*Analysis of Variance for the Professional Growth Opportunities Provided for Principal by Years Served as a Principal*

Years served as a principal	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	278	2.13	.959		
6-10	190	2.15	.925		
1-5	167	2.17	.918		
16-20	93	2.15	1.032		
21-25	68	2.09	.842		
26-30	64	2.16	.996		
31+	28	1.89	.956		
Total	888	2.13	.944	.399	.880

Table 10

*Analysis of Variance for the Professional Growth Opportunities Provided for Principal by Years Served in Present School*

Years served in present school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	482	2.18	.984		
6-10	203	2.06	.899		
11+	205	2.09	.884		
Total	890	2.13	.943	1.477	.229

The analysis of variance indicated no significant differences between the number of years principals served in their present schools and professional growth opportunities  $F(2, 887) = 1.477, p > .05$ . The results of a one-way ANOVA are reported in Table 10. These data indicated that job satisfaction with professional growth opportunities was unaffected by years served in present school.

The analysis of variance indicated significant differences among elementary, middle/junior high, and high school principals  $F(2, 887) = 5.217, p < .05$ . The results of a one-way ANOVA are presented in Table 11. A Scheffé post hoc test indicated the means between elementary and high school principals differed significantly ( $p = .007$ ), with small effect size  $d = .23$ . Principals in elementary schools ( $M = 2.04$ ) appeared to be more satisfied with their professional growth opportunities than their high school colleagues ( $M = 2.26$ ).

Table 11

*Analysis of Variance for the Professional Growth Opportunities Provided for Principal by Type of School*

Type of school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Elementary	447	2.04	.946		
Middle/Junior High	158	2.18	.895		
High	285	2.26	.951		
Total	890	2.13	.943	5.217	.006*

\*The mean is significant at the .05 levels (2-tailed).

### Factor 3. Adequacy of administrative support provided for principals.

The highest satisfaction scores were observed for male principals ( $M = 2.20$ ,  $SD = 1.095$ ), for principals who served 1-5 years in the principalship ( $M = 2.08$ ,  $SD = 1.087$ ), for principals serving in their present schools 1-5 years ( $M = 2.17$ ,  $SD = 1.086$ ), and for high school principals ( $M = 2.15$ ,  $SD = 1.036$ ). All of these highest scores fell within the *moderately satisfied* range on the questionnaire (2.00-2.99).

The lowest scores for adequacy of administrative support provided for principals were found for female principals ( $M = 2.22$ ,  $SD = 1.098$ ), for principals who served 16-20 years in the principalship ( $M = 2.37$ ,  $SD = 1.146$ , for principals serving in present school 6 – 10 years ( $M = 2.26$ ,  $SD = 1.112$ ), and for middle/junior high school principals ( $M = 2.25$ ,  $SD = 1.134$ ). All of these lowest scores fell within the *moderately satisfied* range on the questionnaire (2.00-2.00).

An independent  $t$ -test indicated no significant difference  $t(887) = .164$   $p > .869$  for the adequacy of administrative support provided for principals between males ( $M = 2.20$ ) and females ( $M = 2.22$ ). These data indicated that job satisfaction with the adequacy of administrative support provided for principals is not influenced by sex of the principals.

Table 12

*Analysis of Variance for the Adequacy of Administrative Support Provided for Principal by Years Served as a Principal*

Years served as a principal	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	278	2.08	1.087		
6-10	191	2.21	1.072		
11-15	168	2.29	1.118		
16-20	92	2.37	1.146		
21-25	68	2.21	1.030		
26-30	64	2.25	1.069		
31+	28	2.14	1.208		
Total	889	2.20	1.095	1.136	.339

The results of a one-way ANOVA are reported in Table 12. The analysis of variance indicated no significant differences between the principals' years served as principals and the adequacy of administrative support provided for principals  $F(6, 882) = 1.136, p > .05$ . These results indicated that job satisfaction with the adequacy of administrative support provided for principals is unaffected by years served in the principalship.

Table 13

*Analysis of Variance for the Adequacy of Administrative Support Provided for Principal by Years Served in Present School*

Years served in present school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	483	2.17	1.086		
6-10	204	2.26	1.122		
11+	204	2.24	1.090		
Total	891	2.21	1.095	.720	.487

The results of a one-way ANOVA are reported in Table 13. Analysis of variance indicated no statistically significant differences between years served in their present school and adequacy of administrative support provided for principals  $F(2, 888) = .720, p > .05$ . The data indicated that job satisfaction with the adequacy of administrative support provided for principals is unaffected by years served in present school.

The results of a one-way ANOVA are reported in Table 14. The analysis of variance indicated no statistically significant differences between types of schools and adequacy of administrative support provided for principals  $F(2, 888) = .637, p > .05$ .

These results indicated that job satisfaction with the adequacy of administrative support provided for principals was unaffected by type of school.

Table 14

*Analysis of Variance for the Adequacy of Administrative Support Provided for Principal by Type of School*

Type of school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Elementary	447	2.23	1.119		
Middle/Junior High	158	2.25	1.134		
High	286	2.15	1.036		
Total	891	2.21	1.095	.637	.529

Factor 4. Adequacy of support services provided for you.

The highest scores for this factor were seen for female principals ( $M = 2.45$ ,  $SD = .948$ ), for principals who served 21-25 years in the principalship ( $M = 2.34$ ,  $SD = 1.008$ ), for principals serving in their present school 11 and more years ( $M = 2.41$ ,  $SD = .966$ ), and for high school principals ( $M = 2.41$ ,  $SD = .870$ ). All of these highest scores fell within the *moderately satisfied* range on the questionnaire (2.00-2.99).

The lowest scores were seen for male principals ( $M = 2.48$ ,  $SD = .943$ ), for principals who served 26-30 years in the principalship ( $M = 2.55$ ,  $SD = .925$ ), for principals serving 6-10 years in their present school ( $M = 2.50$ ,  $SD = .949$ ), and for middle/junior high school principals ( $M = 2.63$ ,  $SD = .973$ ). All of these lowest scores fell within the *moderately satisfied* range on the questionnaire (2.00-2.99).



The independent *t*-test indicated no significant difference for the adequacy of support services provided for principal  $t(884) = .456, p > .649$ , between males ( $M = 2.48$ ) and females ( $M = 2.45$ ). These results indicated that job satisfaction with the adequacy of support services provided for principals was not influenced by the sex of the principals.

Table 15

*Analysis of Variance for the Adequacy of Support Services Provided for Principal by Years Served as a Principal*

Years served as a principal	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	277	2.49	.911		
6-10	191	2.45	.932		
11-15	167	2.46	.923		
16-20	92	2.50	1.054		
21-25	67	2.34	1.008		
26-30	64	2.55	.925		
31+	28	2.50	1.000		
Total	886	2.47	.943	.335	.918

The analysis of variance indicated no significant difference between job satisfaction and adequacy of support services provided for principals  $F(6, 879) = .335, p > .05$ . The results of one-way ANOVA are reported in Table 15. These results indicated that job satisfaction with adequacy of support services provided for principals was unaffected by years served in the principalship.

The results of a one-way ANOVA are reported in Table 16. The analysis of variance indicated no significant differences between job satisfaction with adequacy of

support services provided for principals and years served in their present school  $F(2, 881) = .550, p > .05$ . These results indicated that job satisfaction with the adequacy of support services provided for principals was unaffected by years served in present school.

Table 16

*Analysis of Variance for the Adequacy of Support Services Provided for Principal by Years Served in Present School*

Years served in present school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	480	2.48	.932		
6-10	204	2.50	.949		
11+	204	2.41	.966		
Total	888	2.47	.943	.550	.577

Table 17

*Analysis of Variance for the Adequacy of Support Services Provided for Principal by Type of School*

Type of school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Elementary	445	2.45	.973		
Middle/Junior High	158	2.63	.973		
High	285	2.41	.870		
Total	888	2.47	.943	3.043	.048*

\* The mean is significant at the .05 level (2-tailed).

The results of one-way ANOVA are reported in Table 17. The analysis of variance indicated a statistically significant difference for type of school  $F(2, 881) =$

3.043,  $p < .05$ . The Scheffé post hoc test revealed no significant difference among type of schools.

Factor 5. Community demands placed on you as a principal outside of the school.

The highest job satisfaction scores were seen for female principals ( $M = 2.59$ ,  $SD = .914$ ), for principals who served 26-30 years in the principalship ( $M = 2.25$ ,  $SD = .816$ ), for principals serving in their present school 11 and more years, ( $M = 2.47$ ,  $SD = .993$ ), and for principals of elementary schools ( $M = 2.48$ ,  $SD = .905$ ). All of these mean scores were within the 2.00-2.99 range indicating that principals were *moderately satisfied* with the community demands placed on principals outside of school.

The lowest scores were for male principals ( $M = 2.65$ ,  $SD = .999$ ), for principals who served 6-10 years in the principalship ( $M = 2.77$ ,  $SD = .938$ ), for principals who served in their present schools 1-5 years ( $M = 2.71$ ,  $SD = .964$ ), and for high school principals ( $M = 2.82$ ,  $SD = 1.009$ ). All of these mean scores fell within the 2.00 and 2.99 range indicating that principals were *moderately satisfied* with the community demands outside of the school.

The independent  $t$ -test indicated no significant differences for the community demands placed on principals outside of school  $t(888) = .855$ ,  $p > .393$  between males ( $M = 2.65$ ) and females ( $M = 2.59$ ). These results indicated that community demands placed on principals outside of school were not influenced by the sex of the principals.

The results of a one-way ANOVA are reported in Table 18. The analysis of variance indicated a significant difference for the number of years served as a principal and the job satisfaction with community demands placed on principals outside of school  $F(6,$

883) = 3.483,  $p < .05$ . Scheffé post hoc test indicated statistically significant differences between the means of principals who served 6-10 and 26-30 years as principals ( $p = .030$ ), with small effect size  $d = .29$ . Principals who served as principals 26-30 years ( $M = 2.25$ ) were significantly more satisfied than principals who served as principals 6-10 years ( $M = 2.77$ ).

Table 18

*Analysis of Variance for Community Demands Placed on Principal by Years Served as a Principal*

Years served as a principal	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	278	2.71	.971		
6-10	191	2.77	.938		
11-15	168	2.63	.983		
16-20	93	2.58	1.097		
21-25	68	2.47	.938		
26-30	64	2.25	.816		
31+	28	2.32	.983		
Total	890	2.63	.976	3.483	.002*

\* The mean is significant at the .05 level (2-tailed).

The results of a one-way ANOVA are reported in Table 19. The analysis of variance indicated a statistically significant differences for principals who served in their present school and job satisfaction with community demands placed on principals  $F(2, 885) = 4.249$ ,  $p < .05$ . Scheffé post hoc test indicated significant differences between means of principals who served 1-5 years in their present school with principals who served more than 11 years in their present school ( $p=.015$ ), with a small effect size  $d =$

Table 19

*Analysis of Variance for Community Demands Placed on Principal by Years Served in Present School*

Years in present school	N	Mean	SD	F	p
1-5	483	2.71	.964		
6-10	204	2.61	.974		
11+	205	2.47	.993		
Total	892	2.63	.976	4.249	.015*

\* The mean is significant at the .05 level (2-tailed).

.24. Principals who served 11 and more years in their present school ( $M = 2.47$ ) appeared to have been significantly more satisfied than principals who served 1-5 years in their present school ( $M = 2.71$ ).

Table 20

*Analysis of Variance for Community Demands Placed on Principal by Type of School*

Type of school	N	Mean	SD	F	p
Elementary	447	2.48	.905		
Middle/Junior High	158	2.73	1.043		
High	287	2.82	1.009		
Total	892	2.63	.976	11.706	.000**

\*\* The mean is significant at the .001 level (2 - tailed).

The results of a one-way ANOVA are reported in Table 20. The analysis of variance indicated significant differences between means of community demands placed on principals outside of school and the type of school  $F(2, 879) = 11.706, p < .001$ . Scheffé post hoc test indicated significant differences between elementary and high

school principals ( $p = .001$ ) and between elementary and middle/junior high school principals ( $p = .17$ ) Elementary school principals ( $M = 2.48$ ) appeared to have been significantly more satisfied with the community demands than middle/junior high school principals ( $M = 2.73$ ) with a small effect size  $d = .27$ , and than high school principals ( $M = 2.82$ ) with a small effect size  $d = .35$ .

#### Factor 6. Extracurricular demands placed on principals.

The highest job satisfaction scores for extracurricular demands placed on principals were observed for female principals ( $M = 2.93$ ,  $SD = 1.055$ ), for principals who served 26-30 years in the principalship ( $M = 2.92$ ,  $SD = 1.088$ ), for principals serving 1-5 years in their present school ( $M = 3.03$ ,  $SD = 1.130$ ), and for elementary school principals ( $M = 2.77$ ,  $SD = .995$ ). Three of these highest scores fell within the *moderately satisfied* range (2.00-2.99), one fell within *neutral* range (3.00-3.99) on the questionnaire scale.

The lowest job satisfaction score were observed for male principals ( $M = 3.12$ ,  $SD = 1.055$ ), for principals who served 6-10 years in the principalship ( $M = 3.20$ ,  $SD = 1.090$ ), for principals serving 11 and more years in their present school ( $M = 3.12$ ,  $SD = 1.110$ ), and for high school principals ( $M = 3.51$ ,  $SD = 1.137$ ). All of these lowest scores fell within the *neutral* range (3.00-3.99) on the questionnaire scale.

The independent  $t$ -test indicated a statistically significant difference  $t(887) = 2.493$ ,  $p < .013$  with small effect size  $d = .17$  for extra-curricular demands placed on principals between males ( $M = 3.12$ ) and females ( $M = 2.93$ ). Males were less satisfied with the extracurricular demands placed on principals than females.

Table 21

*Analysis of Variance for Extracurricular Demands by Years Served as a Principal*

Years served as a principal	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	278	2.96	1.123		
6-10	190	3.20	1.090		
11-15	168	3.14	1.088		
16-20	93	3.13	1.200		
21-25	68	3.00	1.051		
26-30	64	2.92	1.088		
31+	28	3.07	1.120		
Total	889	3.07	1.111	1.294	.257

The results of a one-way ANOVA are reported in the Table 21. The analysis of variance indicated no significant differences for years served as principals and extracurricular demands placed on principals  $F(6, 882) = 1.294, p > .05$ . These results indicated that job satisfaction with extracurricular demands placed on principals was unaffected by years served in the principalship.

Table 22

*Analysis of Variance for Extracurricular Demands by Years Served in Present School*

Years served in present school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	482	3.03	1.130		
6-10	204	3.11	1.065		
11+	205	3.12	1.110		
Total	891	3.07	1.111	.694	.500

The results of a one-way ANOVA are reported in the Table 22. The analysis of variance indicated no significant differences for years served in present schools and

extracurricular demands  $F(6, 884) = .694, p > .05$ . These results indicated that job satisfaction with extracurricular demands placed on principals was unaffected by years served in present school.

Table 23

*Analysis of Variance for Extracurricular Demands by Type of School*

Type of school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Elementary	446	2.77	.995		
Middle/Junior High	158	3.11	1.109		
High	287	3.51	1.137		
Total	891	3.07	1.111	41.752	.000**

\*\* The mean difference is significant at .001 levels (2-tailed).

The results of one-way ANOVA are reported in the Table 23. The analyses of variance reports indicated statistically significant differences between type of school  $F(2, 888) = 41.752, p < .001$ . Scheffé post hoc test indicated significant differences among the means for all three types of schools. Elementary principals ( $M = 2.77$ ) were more satisfied with the extracurricular activities than middle/junior high school principals ( $M = 3.11$ ), ( $p = .003$ ), with a small effect size  $d = .32$  and more satisfied than high school principals ( $M = 3.51$ ), ( $p = .001$ ), with a moderate effect size  $d = .68$ . Middle/junior high school principals were more satisfied with extra curricular activities than high school principals ( $p = .001$ ), with a small effect size  $d = .36$ .



Factor 7. Time available for activities that put balance in your life.

The highest job satisfaction scores were observed for male principals ( $M = 3.65$ ,  $SD = 1.116$ ), for principals who served 26-30 years in the principalship ( $M = 3.16$ ,  $SD = 1.171$ ), for principals serving 11 and more years in their present position ( $M = 3.51$ ,  $SD = 1.060$ ), and for elementary school principals ( $M = 3.51$ ,  $SD = 1.136$ ). All of these highest scores fell within the *neutral* range (3.00-3.99) on the questionnaire scale.

The lowest job satisfaction scores were observed for female principals ( $M = 3.77$ ,  $SD = 1.008$ ), for principals who served 6-10 and 11-15 years in the principalship ( $M = 3.82$ ,  $SD = 1.049$  and  $SD = .956$ ), for principals serving 1-5 years in their present school ( $M = 3.76$ ,  $SD = 1.080$ ), and for high school principals ( $M = 3.96$ ,  $SD = .985$ ). All of the lowest scores fell within the *neutral* range (3.00-3.99) on the questionnaire scale.

The independent  $t$ -test indicated no significant difference  $t(886) = -1.465$ ,  $p > .144$  for time available for activities that put balance in a principal's life between males ( $M = 3.65$ ) and females ( $M = 3.77$ ). These results indicated that job satisfaction with time available for activities that put balance in principal's life was not influenced by the sex of principals.

The results of a one-way ANOVA are reported in Table 24. Analysis of variance indicated a significant difference between years served as a principal and time available for activities that put balance in principal's life  $F(6, 881) = 4.782$ ,  $p < .001$ ). Scheffé post hoc test indicated statistically significant differences between groups of principals.

Table 24

*Analysis of Variance for Time Available for Activities that Put Balance in Principal's**Life by Years Served as a Principal*

Years served as a principal	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	277	3.75	1.092		
6-10	190	3.82	1.049		
11-15	168	3.82	.956		
16-20	93	3.53	1.109		
21-15	68	3.46	1.177		
26-30	64	3.16	1.171		
31+	28	3.46	1.138		
Total	888	3.68	1.088	4.782	.000**

\* \* The mean is significant at the .001 level (2-tailed).

Principals who served 1-5 years ( $M = 3.75$ ) were less satisfied than principals who served 26-30 years ( $p = 0.14$ ) with ( $M = 3.16$ ), and with a moderate effect size  $d = .53$ . Principals who served 6-10 years ( $M = 3.82$ ) were less satisfied than principals who served 26-30 years ( $p = 0.06$ ), ( $M = 3.16$ ), with a moderate effect size  $d = .53$ . Principals who served 6-10 years ( $M = 3.82$ ) were less satisfied than principals who served 26-30 years ( $p = 0.06$ ), ( $M = 3.16$ ), with a moderate effect size  $d = .62$ .

The results of a one-way ANOVA are reported in Table 25. The analysis of variance indicated a significant difference between years served in present school and time available for activities that put balance in principals' lives  $F(2, 887) = 3.904, p < .05$ . Scheffé post hoc test indicated a significant difference between the means of principals

Table 25

*Analysis of Variance for Time Available for Activities that Put Balance in Principal's Life by Years Served in Present School*

Years served in present school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	482	3.76	1.080		
6-10	203	3.67	1.115		
11+	205	3.51	1.060		
Total	890	3.68	1.087	3.904	.021*

\* The mean is significant at the .05 level (2-tailed).

who served 1-5 years in their present school ( $M = 3.76$ ) and 11 and more years ( $M = 3.51$ ) in present school ( $p = .021$ ), with a small effect size  $d = .23$ . Principals who served 1-5 years in their present school were less satisfied with time available for activities that put balance in their life than principals who served 11 and more years.

Table 26

*Analysis of Variance for Time Available for Activities that Put Balance in Principal's Life by Type of School*

Type of school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Elementary	445	3.51	1.136		
Middle/Junior High	158	3.68	1.024		
High	287	3.96	.985		
Total	890	3.68	1.087	15.459	.000**

\*\*The mean is significant at the .001 level (2-tailed).

The results of a one-way ANOVA are reported in Table 26. The analysis of variance indicated a significant difference between type of school and time available that

put balance in the principal's life  $F(2, 887) = 15.459, p < .001$ . Scheffé post hoc test indicated significant differences between elementary and high school principals ( $p = .030$ ), with a small effect size  $d = .23$  and middle/junior high and high school principals ( $p = .001$ ), with a small effect size  $d = .14$ . Principals of elementary schools ( $M = 3.51$ ) were more satisfied with time available for activities that put balance into their life than high school principals ( $M = 3.96$ ). High school principals ( $M = 3.96$ ) were less satisfied with time available for activities that put balance in their life than middle/junior high school principals ( $M = 3.11$ ).

#### Factor 8. Relationship with the administrative team/cabinet.

The highest job satisfaction scores were observed for male principals ( $M = 1.85$ ,  $SD = 1.010$ ), for principals who served 6-10 years in the principalship, ( $M = 1.81$ ,  $SD = .955$ ), for principals serving 6-10 years in their present position ( $M = 1.88$ ,  $SD = 1.055$ ), and for high school principals ( $M = 1.82$ ,  $SD = 1.006$ ). All of these highest scores fell within the *moderately satisfied* range (2.00-2.99) on the questionnaire scale.

The lowest job satisfaction scores were observed for female principals ( $M = 2.01$ ,  $SD = 1.078$ ), for principals who had served 31 or more years in the principalship ( $M = 2.14$ ,  $SD = 1.268$ ), for principals serving 11 or more years in their present school ( $M = 1.93$ ,  $SD = 1.029$ ), and for middle/junior high school principals ( $M = 1.99$ ,  $SD = 1.085$ ). All of these lowest scores were within the *moderately satisfied* range (2.00-2.99) on the questionnaire scale.

An independent  $t$ -test indicated statistically significant differences  $t(888) = -2.036, p < .042$ , on the relationship with the team/cabinet between males ( $M = 1.85$ )

and females ( $M = 2.01$ ). Males were more satisfied with their relationship with the team/cabinet than females.

Table 27

*Analysis of Variance for the Relationship with the Team/Cabinet by Years Served as a Principal*

Years served as a principal	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	278	1.83	.992		
6-10	191	1.81	.955		
11-15	168	1.97	1.113		
16-20	93	1.94	1.009		
21-25	68	1.94	1.035		
26-30	64	1.98	1.134		
31+	28	2.14	1.268		
Total	890	1.89	1.033	.910	.487

The results of a one-way ANOVA are reported in Table 27. The analysis of variance indicated no significant differences between years served as a principal and the principal's relationship with the team/cabinet  $F(6, 883) = .910, p > .05$ . The results indicated that job satisfaction and relationship with administrative cabinet was unaffected by years served in the principalship.

The results of a one-way ANOVA are reported in the Table 28. The analysis of variance indicated no significant difference between years served in present school and the relationship with team/cabinet  $F(2, 889) = .137, p > .872$ . These results indicated that job satisfaction regarding their relationship with the team/cabinet was unaffected by years served in present school.

Table 28

*Analysis of Variance for the Relationship with the Team/Cabinet by Years Served in Present School*

Years served in present school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>P</i>
1-5	483	1.89	1.025		
6-10	204	1.88	1.055		
11+	205	1.93	1.029		
Total	892	1.89	1.032	.137	.872

Table 29

*Analysis of Variance for the Relationship with the Team/Cabinet by Type of School*

Type of school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Elementary	447	1.91	1.027		
Middle/Junior High	158	1.99	1.085		
High	287	1.82	1.006		
Total	892	1.89	1.032	1.632	.196

The results of a one-way ANOVA are reported in Table 29. The analysis of variance indicated no significant differences between type of school and relationship with administrative team/cabinet  $F(2, 889) = 1.632$ ,  $p > .05$ . These results indicated that job satisfaction regarding the relationship with the administrative team/cabinet was unaffected by type of school.

#### Factor 9. Relationship with the board of education.

The highest scores for job satisfaction and for relationship with the board of education were observed for female principals ( $M = 2.11$ ,  $SD 1.047$ ), for principals who

served 31 or more years in the principalship ( $M = 2.00$ ,  $SD = .981$ ), for principals serving in present school 11 or more years ( $M = 2.08$ ,  $SD = 1.059$ ), and for high school principals ( $M = 2.07$ ,  $SD = 1.064$ ). All of these highest scores fell within the 2.00 and 2.99 range indicating that the principals were *moderately satisfied* with the relationship with the board of education.

The lowest scores were observed for male principals ( $M = 2.12$ ,  $SD = 1.093$ ), for principals who served 11-15 and 21-25 years in the principalship ( $M = 2.28$ ,  $SD = 1.118$ ) and ( $M = 2.28$ ,  $SD = .1139$ ) respectively, for principals serving 6-10 years in their present schools ( $M = 2.21$ ,  $SD = 1.160$ ), and for middle/junior high school principals ( $M = 2.18$ ,  $SD = 1.137$ ). All of these lowest scores fell within the 2.00 and 2.99 range, indicating that the principals were *moderately satisfied* with their relationship with the board of education.

The independent  $t$ -test indicated no significant difference  $t(883) = .094$ ,  $p > .925$ , in the relationship with the board of education between males ( $M = 2.12$ ) and females ( $M = 2.11$ ). Females appeared to have been more satisfied with their relationship with the board of education than males. These results indicated that job satisfaction regarding the relationship with the board of education was influenced by sex of principals.

The results of a one-way ANOVA are reported in Table 30. The analysis of variance indicated no significant differences between years served as a principal and relationship with the board of education  $F(6, 878) = 1.530$ ,  $p > .05$ . These results indicated that job satisfaction and the relationship with the board of education was unaffected by years served in the principalship.

Table 30

*Analysis of Variance for the Relationship with the Board of Education by Years Served as a Principal*

Years served as a principal	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	275	2.04	1.030		
6-10	191	2.01	1.064		
11-15	167	2.28	1.118		
16-20	93	2.16	1.135		
21-25	67	2.28	1.139		
26-30	64	2.13	1.076		
31+	28	2.00	.981		
Total	885	2.11	1.078	1.530	.165

The results of a one-way ANOVA are reported in Table 31. The analysis of variance indicated no significant differences between years served in the present school and the relationship with the board of education  $F(2, 884) = .964, p > .05$ . These results indicated that job satisfaction and the relationship with the board of education was unaffected by years served in present school.

Table 31

*Analysis of Variance for the Relationship with the Board of Education by Years Served in Present School*

Years in present school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	479	2.09	1.051		
6-10	204	2.21	1.160		
11+	204	2.08	1.059		
Total	887	2.11	1.079	.964	.382



Table 32

*Analysis of Variance for the Relationship with the Board of Education by Type of School*

Type of school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Elementary	444	2.12	1.069		
Middle/Junior High	157	2.18	1.137		
High	286	2.07	1.064		
Total	887	2.11	1.079	.577	.562

The results of a one-way ANOVA are reported in Table 32. The analysis of variance indicated no significant difference between type of school and the relationship with the board of education  $F(2, 884) = .577, p > .05$ . The data indicated that job satisfaction and a principal's relationship with the board of education was unaffected by type of school.

Factor 10. Relationship with the parents of your school.

The highest scores for relationship with parents were observed for female principals ( $M = 1.61, SD = .611$ ), for principals who served 31 or more years in the principalship ( $M = 1.48, SD = .509$ ), for principals serving 11 or more years in present school ( $M = 1.65, SD = .661$ ), and for principals of elementary schools ( $M = 1.61, SD = .619$ ). All of these highest scores fell within the 1.00 and 1.99 range indicating that principals were *very satisfied* with their relationship with the parents of their schools.

The lowest scores were observed for male principals ( $M = 1.80, SD = .680$ ), for principals who served 1-5 years in the principalship ( $M = 1.82, SD = .712$ ), for principals serving in present school 1-5 years ( $M = 1.80, SD = .687$ ), and for high school principals

( $M = 1.93$ ,  $SD = .691$ ). All of these lowest scores fell within the 1.00 and 1.99 range indicating a *very satisfied* relationship with the parents of their schools.

The independent  $t$ -test indicated a statistically significant difference  $t(887) = 3.769$ ,  $p < .001$ , for the relationship with the parents of the school between males ( $M = 1.80$ ) and females ( $M = 1.61$ ), with a small effect size  $d = .29$ . Females appeared to have been more satisfied than males with the relationship with the parents.

The results of the ANOVA are reported in Table 33. The analysis of variance indicated a significant difference between years served as a principal and relationship with the parents  $F(6, 882) = 2.533$ ,  $p < .05$ . However, Scheffé post hoc test did not reveal significant differences in group comparisons.

Table 33

*Analyses of Variance for the Relationship with the Parents by Years Served as a Principal*

Years served as a principal	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	278	1.82	.712		
6-10	191	1.75	.630		
11-15	168	1.78	.623		
16-20	93	1.65	.654		
21-25	68	1.66	.765		
26-30	64	1.59	.583		
31+	27	1.48	.509		
Total	889	1.74	.666	2.533	.019*

Table 34

*Analyses of Variance for the Relationship with the Parents by Years Served in Present School*

Years in present school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	483	1.80	.687		
6-10	204	1.70	.608		
11+	204	1.65	.661		
Total	891	1.74	.666	4.365	.013*

\* Mean is significant at the .05 level (2-tailed).

The results of the ANOVA are reported in Table 34. The analysis of variance indicated a statistically significant difference between years served in present school and relationship with parents  $F(2,888) = 4.365, p < .05$ . Scheffe post hoc test indicated a significant difference between the means of principals who served 1-5 years and 11 or more years in their present school ( $p = .024$ ), with a small effect size  $d = .22$ . Principals who served in their present school 1-5 years ( $M = 1.80$ ) were less satisfied with the relationship with the parents than principals who served more than 11 years ( $M = 1.65$ ).

The results of the ANOVA are reported in Table 35. The analysis of variance indicated a significant difference between type of school and relationship with parents  $F(2, 888) = 22.071, p < .001$ . Scheffé post hoc test indicated significant differences between means of elementary and middle/junior high school principals ( $p = .016$ ), with a small effect size  $d = .26$ , and between elementary and high school principals ( $p = .001$ ), with a small effect size  $d = .49$ . Elementary school principals ( $M = 1.61$ ) were more

satisfied than middle/junior high school principals ( $M = 1.78$ ) and than high school principals ( $M = 1.93$ ).

Table 35

*Analysis of Variances for the Relationship with Parents by Type of School*

Type of school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Elementary	446	1.61	.619		
Middle/Junior High	158	1.78	.664		
High	287	1.93	.691		
Total	891	1.74	.666	22.071	.000**

\*\*The mean is significant at the .001 level (2 - tailed).

Factor 11. Relationship with the teachers of your school.

The highest scores for job satisfaction and for relationship with the teachers of the school were seen for female principals ( $M = 1.55$ ,  $SD = .692$ ), for principals with 31 or more years served in principalship ( $M = 1.46$ ,  $SD = .576$ ), for principals serving in their present school 6-10 years ( $M = 1.52$ ,  $SD = .639$ ), and for elementary school principals ( $M = 1.55$ ,  $SD = .653$ ). All of these highest scores fell within the 1.00 and 1.99 range, indicating that the principals were *very satisfied* with their relationship with the teachers in their schools.

The lowest scores were observed for male principals ( $M = 1.65$ ,  $SD = .684$ ), for principals who served 1-5 years in the principalship ( $M = 1.73$ ,  $SD = .735$ ), for principals serving in their present school 1-5 years ( $M = 1.70$ ,  $SD = .705$ ), and for principals at high schools ( $M = 1.69$ ,  $SD = .689$ ). All of these lowest scores fell within the 1.00 and 1.99

range indicating that principals were *very satisfied* with their relationship with the teachers of their schools.

The independent *t*-test indicated no significant differences  $t(887) = 1.929, p > .054$ , in the relationship with teachers between males ( $M = 1.65$ ) and females ( $M = 1.55$ ). These results indicated that job satisfaction with relationship with the teachers of the school was not influenced by sex of principals.

The results of a one-way ANOVA are reported in Table 36. The analysis of variance indicated a statistically significant difference based on the number of years served in the principalship and relationship with the teachers  $F(6, 882) = 2.272, p < .035$ . However, a Scheffé post hoc test did not reveal significant differences for group comparisons.

Table 36

*Analysis of Variance for the Relationship with Teachers by Years Served as a Principal*

Years served as a principal	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	277	1.73	.735		
6-10	191	1.58	.609		
11-15	168	1.64	.712		
16-20	93	1.53	.716		
21-25	68	1.56	.678		
26-30	64	1.48	.591		
31+	28	1.46	.576		
Total	889	1.62	.687	2.272	.035*

The results of a one-way ANOVA are reported in Table 37. The analysis of variance report indicated a significant difference between the means of principals based

on their years in their present school and the relationship with the teachers of their school  $F(2, 888) = 7.362, p < .001$ . A Scheffé post hoc test indicated a significant difference between means of principals who served in their present school 1-5 years and 6-10 years ( $p = .007$ ) with a small effect size  $d = .26$ , and principals who served 1-5 years and more than 11 years ( $p = .010$ ) with a moderate effect size  $d = .69$ . Principals who served in their present school 1-5 years ( $M = 1.70$ ) were less satisfied than principals who served 6-10 years ( $M = 1.52$ ). Also principals who served in their present school 1-5 years ( $M = 1.70$ ) were less satisfied than principals who served in their present school more than 11 years ( $M = 1.53$ ).

Table 37

*Analysis of Variance for the Relationship with Teachers by Years Served in Present School*

Years served in present school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	482	1.70	.705		
6-10	204	1.52	.639		
11+	205	1.53	.668		
Total	891	1.62	.687	7.362	.001**

\* Mean is significant at the .05 level (2-tailed).

The results of a one-way ANOVA are reported in table 38. The analysis of variance indicated a statistically significant difference between type of school and the principal's relationship with the parents of the school  $F(2, 888) = 3.880, p < .05$ . Scheffé post hoc test indicated a significant difference between elementary and high school

Table 38

*Analysis of Variance for the Relationship with Teachers by Type of School*

Type of school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Elementary	447	1.55	.653		
Middle/Junior High	157	1.68	.761		
High	287	1.69	.689		
Total	891	1.62	.687	3.880	.021*

\*The mean is significant at the .05 level (2-tailed).

principals ( $p = .040$ ), with small effect size  $d = .17$ . Elementary principals ( $M = 1.55$ ) were more satisfied with the relationship with the teachers of their schools than high school principals ( $M = 1.69$ ).

Factor 12. Consistency of the board in making decisions in the best interest of children.

The highest scores were observed for male principals ( $M = 2.30$ ,  $SD = 1.138$ ), for principals who served 31 and more years in the principalship ( $M = 2.14$ ,  $SD = 1.008$ ), for principals serving in their present schools 1-5 years ( $M = 2.26$ ,  $SD = 1.126$ ), and for high school principals ( $M = 2.23$ ,  $SD = 1.105$ ). All of these highest scores fell within the 2.00 and 2.99 range on the questionnaire scales indicating that principals were *moderately satisfied* with the consistency of the board making decisions in the best interest of children.

The lowest scores were observed for female principals ( $M = 2.32$ ,  $SD = 1.148$ ), for principals who served 21-25 years in the principalship ( $M = 2.49$ ,  $SD = 1.203$ ), for principals serving in their present school 6-10 years ( $M = 2.40$ ,  $SD = 1.138$ ), and for

middle/junior high school principals ( $M = 2.45$ ,  $SD = 1.244$ ). All of these lowest scores fell within the 2.00 and 2.99 range on questionnaire scales indicating that principals were *moderately satisfied* with the consistency of the board making decisions in the best interest of children.

The independent  $t$ -test indicated no statistically significant difference  $t(888) = -.266$ ,  $p > .790$ , for the board making decisions in the best interest of children between males ( $M = 2.30$ ) and females ( $M = 2.32$ ). These results indicated that job satisfaction with the consistency of the board making decisions in the best interest of children was not influenced by the sex of principals.

Table 39

*Analysis of Variance for the Consistency of the Board in Making Decisions in the Best Interest of Children by Years Served as a Principal*

Years served as a principal	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	278	2.25	1.114		
6-10	191	2.19	1.074		
11-15	168	2.40	1.154		
15-20	93	2.38	1.285		
21-25	68	2.49	1.203		
25-30	64	2.42	1.124		
31+	28	2.14	1.008		
Total	890	2.31	1.138	1.210	.294

The results of a one-way ANOVA are reported in Table 39. The analysis of variance indicated no significant differences between years served as a principal and the consistency of the board making decisions in the best interest of children  $F(6, 883) =$



1.120,  $p > .05$ . These results indicated that job satisfaction with the consistency of the board making decisions in the best interest of children was unaffected by years served in the principalship.

The results of a one-way ANOVA are reported in Table 40. The analysis of variance indicated no significant difference for job satisfaction with the consistency of

Table 40

*Analysis of Variance for the Consistency of the Board in Making Decisions in the Best Interest of Children by Years Served in Present School*

Years served in present school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	483	2.26	1.126		
6-10	204	2.40	1.138		
11+	205	2.32	1.169		
Total	892	2.31	1.139	1.160	.314

the board making decisions in the best interest of students and years served as a principal in present school  $F(2, 889) = 1.160$ ,  $p > .05$ . These results indicated that principals' job satisfaction was unaffected by years served in their present school.

The results of a one-way ANOVA are reported in Table 41. The analysis of variance indicated no statistically significant difference for job satisfaction with the consistency of the board making decisions in the best interest of students and type of school  $F(2, 889) = 1.841$ ,  $p > .05$ . These results indicated that job satisfaction with the consistency of the board making decisions in the best interest of children was unaffected by type of school.

Table 41

*Analysis of Variance for the Consistency of the Board in Making Decisions in the Best Interest of Children by Type of School*

Type of school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Elementary	447	2.30	1.119		
Middle/Junior High	158	2.45	1.244		
High	287	2.23	1.105		
Total	892	2.31	1.139	1.841	.159

Factor 13. How well the board of education acknowledges your accomplishment.

The highest scores were observed for female principals ( $M = 2.63$ ,  $SD = 1.216$ ), for principals who had served 1-5 years ( $M = 2.57$ ,  $SD = 1.230$ ) and 6-10 years ( $M = 2.57$ ,  $SD = 1.131$ ) in the principalship, for principals serving 1-5 years in their present school ( $M = 2.64$ ,  $SD = 1.217$ ), and for high school principals ( $M = 2.68$ ,  $SD = 1.209$ ). All of these highest scores fell within the 2.00 and 2.99 range on the questionnaire scale indicating that principals were *moderately satisfied* with how well the board of education acknowledges their accomplishments.

The lowest scores were observed for male principals ( $M = 2.76$ ,  $SD = 1.210$ ), for principals who had served 21-25 years in the principalship ( $M = 3.03$ ,  $SD = 1.209$ ), for principals serving in their present school 11 and more years ( $M = 2.84$ ,  $SD = 1.179$ ), and for middle/junior high school principals ( $M = 2.82$ ,  $SD = 1.266$ ). Three of these lowest scores fell within the *moderately satisfied* range on the questionnaire scales (2.00-2.99). One score fell within the *neutral* range of questionnaire scale (3.00-3.99).

The independent  $t$ -test indicated no statistically significant difference  $t(886) = 1.410, p > .159$ , for how well the board of education acknowledged principals' accomplishments between males ( $M = 2.76$ ) and females ( $M = 2.63$ ). These results indicated that job satisfaction with how well the board of education acknowledges a principal's accomplishments was not influenced by the sex of the principals.

Table 42

*Analysis of Variance for How Well the Board of the Education Acknowledges Principal's Accomplishments by Years Served as a Principal*

Years served as a principal	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	277	2.57	1.230		
6-10	191	2.57	1.131		
11-15	168	2.92	1.181		
16-20	93	2.89	1.255		
21-25	68	3.03	1.209		
26-30	64	2.72	1.228		
31+	28	2.82	1.219		
Total	889	2.72	1.209	3.101	.005*

\* The mean is significant wt the .05 level (2-tailed).

The results of a one-way ANOVA in Table 42 reported a statistically significant difference between number of years served as principal and how well the board of education acknowledged a principal's accomplishments  $F(6, 882) = 3.101, p < .05$ . However, a Scheffé post hoc test showed no significant difference among groups of principals.

Table 43 presents the results of the one-way ANOVA. The analysis of variance indicated no significant differences between how well board of education acknowledged

a principal's accomplishments and number of years served in the present school  $F(2, 888) = 2.451, p > .05$ . These results indicated the variable did not affect this factor.

Table 43

*Analysis of Variance for How Well the Board of Education Acknowledges Principal's Accomplishments by Years Served in Present School*

Years served in present school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	482	2.64	1.217		
6-10	204	2.80	1.221		
11 +	205	2.84	1.179		
Total	891	2.72	1.212	2.451	.087

Table 44

*Analysis of Variance for How Well the Board of Education Acknowledges Principal's Accomplishments by Type of School*

Type of school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Elementary	446	2.72	1.194		
Middle	158	2.82	1.266		
High	287	2.68	1.209		
Total	891	2.72	1.212	.636	.530

The results of a one-way ANOVA reported in Table 44 indicated no significant differences between job satisfaction with how well the board of education acknowledged principals' accomplishments and type of school  $F(2, 888) = .636, p < .05$ . These results indicated type of school did not affect job satisfaction for this factor.

Factor 14. Your annual salary.

The highest scores were observed for male principals ( $M = 2.96$ ,  $SD = 1.169$ ), for principals who had served 26-30 years in the principalship ( $M = 2.72$ ,  $SD = 1.175$ ), for principals serving 11 and more years in their present school ( $M = 2.92$ ,  $SD = 1.139$ ), and for high school principals ( $M = 2.93$ ,  $SD = 1.207$ ). All of these highest scores fell within the 2.00 and 2.99 range on the Iowa questionnaire scale indicating that principals were *moderately satisfied* with their annual salary.

The lowest scores were observed for female principals ( $M = 3.00$ ,  $SD = 1.209$ , for principals who had served 11-15 years in the principalship ( $M = 3.07$ ,  $SD = 1.148$ ), for principals who had served 1-5 years ( $M = 3.07$ ,  $SD = 1.193$ ), 6 - 10 years ( $M = 3.00$ ,  $SD = 1.205$ ), and 11 and more years in their present school ( $M = 3.07$ ,  $SD = 1.148$ ), and for middle/junior high school principals ( $M = 3.06$ ,  $SD = 1.142$ ). All of these scores fell within a 3.00-3.99 range on the questionnaire scale indicating that principals felt *neutral* about their annual salary. We could say that principals were neither satisfied, nor dissatisfied with their annual salary.

The independent  $t$ -test indicated no significant difference  $t(897) = -.449$ ,  $p > .653$ , in satisfaction for the annual salary of principals between males ( $M = 2.96$ ) and females ( $M = 3.00$ ). The result indicated that the job satisfaction with the salary was not significantly influenced by the sex of the principals.

The results of a one-way ANOVA are reported in the Table 45. The analysis of variance indicated no significant difference between the number of years served as a principal and the annual salary  $F(6, 882) = 1.557$ ,  $p > .05$ . These results indicated that

Table 45

*Analysis of Variance for the Annual Salary by Years Served as a Principal*

Years served as a principal	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	278	3.07	1.193		
6-10	191	2.92	1.176		
11-15	168	3.07	1.148		
16-20	92	2.99	1.191		
21-25	68	2.74	1.128		
26-30	64	2.72	1.175		
31+	28	2.89	1.286		
Total	889	2.97	1.180	1.557	.157

satisfaction with the annual salary was unaffected by the years principals had served in the principalship.

In Table 46, the results of the one-way ANOVA are reported. The analysis of variance indicated no significant differences for the principal's job satisfaction based on the number of years served in present school and the principal's annual salary  $F(2, 888) = .304, p > .05$ . These results indicated that the variable had no affect on principals' job satisfaction.

Table 46

*Analysis of Variance for the Annual Salary by Years Served in Present School*

Years served in present school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	483	2.99	1.189		
6-10	204	3.00	1.205		
11+	204	2.92	1.139		
Total	891	2.97	1.181	.304	.738

Table 47

*Analysis of Variance for the Annual Salary by Type of School*

Type of school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Elementary	447	2.97	1.179		
Middle/Junior High	157	3.06	1.142		
High	287	2.93	1.207		
Total	891	2.97	1.181	.653	.521

The results of the one-way ANOVA reported in Table 47 indicated no significant difference for type of school and job satisfaction with the annual salary  $F(6, 884) = .653$ ,  $p > .521$ . These data indicated that this factor was unaffected by type of school.

Factor 15. Community's image of school administrators.

The highest scores were found for female principals ( $M = 2.64$ ,  $SD = 1.076$ ), for principals who had served 31 or more years in the principalship ( $M = 2.43$ ,  $SD = 1.034$ ), for principals serving in their present school 11 or more years ( $M = 2.50$ ,  $SD = .968$ ), and for high school principals ( $M = 2.64$ ,  $SD = 1.004$ ). All of these highest scores fell within the *moderately satisfied* range (2.00-2.99) on the questionnaire scale.

The lowest scores were observed for male principals ( $M = 2.65$ ,  $SD = 1.002$ ), principals who had served 11-15 years in the principalship ( $M = 2.73$ ,  $SD = 1.007$ ), principals serving 6-10 years in their present schools ( $M = 2.71$ ,  $SD = 1.076$ ), and for middle/junior high school principals ( $M = 2.66$ ,  $SD = 1.057$ ). All of these lowest scores fell between the *moderately satisfied* range (2.00-2.99) on the questionnaire scale.

The independent *t*-test indicated no statistically significant difference  $t(887) = .166$ ,  $p > .868$ , regarding the community's image of school administrators between males

( $M = 2.65$ ) and females ( $M = 2.64$ ). These results indicated that job satisfaction based on the community's image of principals was not significantly influenced by the sex of the principals.

Table 48

*Analysis of Variance for the Community's Image of School Administrators by Years*

*Served as a Principal*

Years served as a principal	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	278	2.71	1.025		
6-10	190	2.59	.992		
11-15	168	2.73	1.007		
16-20	93	2.66	1.098		
21-25	68	2.60	1.010		
26-30	64	2.47	1.023		
31+	28	2.43	1.034		
Total	889	2.65	1.022	1.118	.412

The results of a one-way ANOVA are reported in Table 48. They indicated no statistically significant differences for job satisfaction between years served as a principal and the community's image of school administrators  $F(6, 882) = 1.118, p > .05$ . These results on this factor of job satisfaction were unaffected by years served in the principalship.

In Table 49, the results of a one-way ANOVA indicated no statistically significant differences for job satisfaction between years served as principals in the present school and the community's image of school administrators  $F(2, 888) = 2.738, p > .065$ . These



results indicated that job satisfaction with the community's image of school administrators was unaffected by years principals served in their present school.

Table 49

*Analysis of Variance for the Community's Image of School Administrators by Years Served in Present School*

Years served in present school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	483	2.68	1.019		
6-10	203	2.71	1.076		
11+	205	2.50	.968		
Total	891	2.65	1.023	2.738	.065

The results of a one-way ANOVA in Table 50 indicated no significant difference for job satisfaction between type of school and the community's image of school administrators  $F(2, 888) = .024, p > .05$ . Therefore, this variable did not affect this factor.

Table 50

*Analysis of Variance for the Community's Image of School Administrators by Type of School*

Type of school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Elementary	446	2.65	1.025		
Middle/Junior/High	158	2.66	1.057		
High	287	2.64	1.004		
Total	891	2.65	1.023	.024	.977

Factor 16. Time spent on management tasks.

The highest scores were found for male principals ( $M = 3.08$ ,  $SD = .978$ ), for principals who had served 26-30 years in the principalship ( $M = 2.73$ ,  $SD = .913$ ), for principals serving 11 or more years in their present school ( $M = 2.94$ ,  $SD = .938$ ), and for elementary principals ( $M = 3.09$ ,  $SD = 1.007$ ). Two of these highest satisfaction scores fell within the *moderately satisfied* range (2.00-2.99) on the questionnaire scale and two of them fell within the *neutral* range (3.00-3.99).

The lowest scores were seen for female principals ( $M = 3.27$ ,  $SD = .095$ ), for principals who had served 11-15 years in the principalship ( $M = 3.24$ ,  $SD = .962$ ), for principals who had served 1-5 years in their present schools ( $M = 3.24$ ,  $SD = .986$ ), and for middle/junior high school principals ( $M = 3.18$ ,  $SD = .948$ ). All of these scores fell within the *neutral* range (3.00-3.99) on the questionnaire scale.

The independent  $t$ -test indicated a statistically significant difference,  $t(888) = -2.649$ ,  $p < .008$ , for the time spent on management tasks between males ( $M = 3.08$ ) and females ( $M = 3.27$ ), with a small effect size  $d = .19$ . Males appeared to have been significantly more satisfied with the time they spent on management tasks than females.

The results of a one-way ANOVA are reported in Table 51. The analysis of variance indicated a statistically significant difference between years served as a principal and time on management tasks  $F(2, 873) = 3.503$ ,  $p < .05$ . Scheffé post hoc test showed that the means for principals who served 1-5 years and 26-30 years differed significantly ( $p = .47$ ), with a moderate effect size  $d = .51$ . Principals who served 26-30 years in the

principalship ( $M = 2.73$ ) were significantly more satisfied with time spent on management tasks than principals who served in the principalship 1-5 years ( $M = 3.22$ ).

Table 51

*Analysis of Variance for the Time Spent on Management Tasks by Years Served as a Principal*

Years served as a principal	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	278	3.22	.983		
6-10	191	3.21	1.004		
11-15	168	3.24	.962		
16-20	93	2.99	1.027		
21-25	68	2.96	.937		
26-30	64	2.73	.913		
31+	28	2.96	.881		
Total	890	3.13	.985	3.503	.002*

\*The mean significant at the .05 level (2-tailed).

Table 52

*Analysis of Variance for the Time Spent on Management Tasks by Years Served in Present School*

Years served in present school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	483	3.24	.986		
6-10	204	3.07	1.000		
11+	205	2.94	.938		
Total	892	3.13	.985	7.271	.001**

\* \*The mean is significant at the .001 level (2-tailed).

The results of a one-way ANOVA are reported in Table 52. The analysis of variance indicated a statistically significant difference between years served in present

school and job satisfaction with time spent on management tasks  $F(2, 889) = 7.271, p < .001$ . Scheffé post hoc test analysis showed that the means for principals who served in their present school differed significantly ( $p = .001$ ), with a small effect size  $d = .30$ . Principals who served 11 or more years in their present schools ( $M = 2.94$ ) were more satisfied with time on management tasks than principals who served 1 - 5 years ( $M = 3.24$ ).

The results of one-way ANOVA are reported in Table 53. The analysis of variance indicated no significant difference for type of school and job satisfaction with time spent on management tasks  $F(2, 889) = .856, p > .429$ . These results indicated that job satisfaction with time spent on management tasks was unaffected by type of school.

Table 53

*Analysis of Variance for the Time Spent on Management Tasks by Type of School*

Type of school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Elementary	447	3.09	1.007		
Middle/Junior High	158	3.18	.948		
High	287	3.17	.970		
Total	892	3.13	.985	.846	.429

Factor 17. Demographic score for job satisfaction and time spent on leadership activities.

The highest scores for this factor were observed for male principals ( $M = 3.17, SD = 1.040$ ), for principals who served 26-30 in the principalship, ( $M = 2.88, SD = .984$ ), for principals serving in their present schools 11 or more years ( $M = 3.02, SD = .980$ ), and

for elementary principals ( $M = 3.06$ ,  $SD = 1.078$ ). Three of these highest scores fell within the *neutral* range (3.00-3.99) on the questionnaire scale and one of these highest scores fell within the *moderately satisfied* range (2.00-2.99) on the questionnaire scale.

The lowest scores were found for female principals ( $M = 3.18$ ,  $SD = 1.080$ ), for principals who served 11 – 15 years in the principalship ( $M = 3.38$ ,  $SD = 1.031$ ), for principals serving in their present schools 1-5 years ( $M = .27$ ,  $SD = 1.071$ ), and for middle/junior high school principals ( $M = 3.29$ ,  $SD = .999$ ). All of these lowest scores fell within the *neutral* range on the questionnaire scale (3.00-3.99).

The independent  $t$ -test indicated no significant difference  $t(888) = -.114$ ,  $p > .909$ , for the time spent on leadership activities between males ( $M = 3.17$ ) and females ( $M = 3.18$ ). These results indicated that the job satisfaction with time spent on leadership tasks was not influenced by sex of principals.

Table 54

*Analysis of Variance for the Time Spent on Leadership Activities by Years Served as a Principal*

Years served as a principal	$N$	$M$	$SD$	$F$	$p$
1-5	278	3.26	1.080		
6-10	191	3.20	1.034		
11-15	168	3.38	1.031		
16-20	93	2.92	1.035		
21-25	68	2.90	.964		
26-30	64	2.88	.984		
31+	28	3.04	1.036		
Total	890	3.17	1.050	4.081	.000**

\* \*\*The mean is significant at the .001 level (2-tailed).

The results of a one-way ANOVA reported in Table 54 indicate a statistically significant difference between years served as a principal and job satisfaction with time spent on leadership tasks  $F(6, 883) = 4.081, p < .001$ . However, Scheffé post hoc test indicated no significant differences.

The results of a one-way ANOVA are reported in Table 55. The analysis of variance indicated a statistically significant difference between years served in present schools and job satisfaction with time spent on leadership tasks  $F(2, 889) = 4.757, p < .05$ . Scheffé post hoc analyses showed that means between principals who served 1 - 5 years

Table 55

*Analysis of Variance for the Time Spent on Leadership Activities by Years Served in Present School*

Served in present school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	483	3.27	1.071		
6-10	204	3.09	1.049		
11+	205	3.02	.980		
Total	892	3.17	1.050	4.757	.009*

\* The mean is significant at the .05 level (2-tailed).

and principals who served 11 or more years differed significantly ( $p = .018$ ), with a small effect size  $d = .24$ . Principals who served 1-5 years ( $M = 3.27$ ) appeared to have been less satisfied with the time spent on leadership tasks than principals who served 11 or more years ( $M = 3.02$ ).

The results of one-way ANOVA reported in Table 56, indicated a statistically significant difference among type of schools and job satisfaction with time spent on

leadership activities  $F(2, 889) = .4778$ ,  $p < .05$ . Scheffé post hoc test indicated significant differences between means for elementary and high school principals ( $p = .031$ ), with small effect size  $d = .20$ . Principals of elementary schools ( $M = 3.06$ )

Table 56

*Analysis of Variance for the Time Spent of Leadership Activities by Type of School*

Type of school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Elementary	447	3.06	1.078		
Middle	158	3.29	.999		
High	287	3.27	1.019		
Total	892	3.17	1.050	4.778	.009*

\* The mean is significant at the .05 level (2-tailed).

were more satisfied with the time spent on leadership activities than high school principals ( $M = 3.27$ ).

Factor 18. Quality of principal's relationship with the superintendent.

The highest scores were observed for this factor were for male principals ( $M = 1.85$ ,  $SD = 1.109$ ), for principals who served 6-10 years in the principalship ( $M = 1.78$ ,  $SD = 1.002$ ), for principals serving in their present school 1-5 years ( $M = 1.86$ ,  $SD = 1.071$ ), and for elementary school principals ( $M = 1.87$ ,  $SD = 1.078$ ). All of these highest scores fell within the *very satisfied* range on the questionnaire scale (1.00-1.99).

The lowest scores was observed for female principals ( $M = 1.98$ ,  $SD = 1.087$ ), for principals who served 16-20 years in the principalship ( $M = 2.13$ ,  $SD = 1.260$ ), for principals serving in their present school 11 or more years ( $M = 1.94$ ,  $SD = 1.084$ ), and for middle/junior high school principals ( $M = 1.94$ ,  $SD = 1.119$ ). Three of these lowest

scores fell within the *very satisfied* range on the questionnaire (1.00-1.99). One score fell within the *moderately satisfied* range on Iowa questionnaire scale (2.00-2.99).

The independent *t*-test indicated no statistically significant difference,  $t(882) = 1.603, p = .109$ , for the quality of a principal's relationship with the superintendent between males ( $M = 1.85$ ) and females ( $M = 1.98$ ). The results indicated that job satisfaction with the quality of a principal's relationship with the superintendent was not influenced by the sex of principals.

Table 57

*Analysis of Variance for the Quality of Principal's Relationship with the Superintendent by Years Served as a Principal*

Years served as a principal	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	277	1.82	1.056		
6-10	189	1.78	1.002		
11-15	167	1.95	1.181		
16-20	92	2.13	1.260		
21-25	68	1.96	1.125		
26-30	64	1.97	1.054		
31+	27	1.81	1.145		
Total	884	1.89	1.102	1.475	.184

The results of a one-way ANOVA are reported in Table 57. The analysis of variance indicated no statistically significant differences between years served as a principal and the quality of a principal's relationship with the superintendent  $F(6, 877) = 1.475, p > .05$ . The data indicated that job satisfaction with the quality of the principal's relationship with the superintendent was unaffected by years in the principalship.



The results of one-way ANOVA are reported in Table 58. The analysis of variance indicated no statistically significant difference between years served in their present school and the quality of a principal's relationship with the superintendent  $F(s, 884) = .410, p > .05$ . The data indicated that job satisfaction and the quality of relationship with the superintendent was unaffected by years served in a principal's present school.

Table 58

*Analysis of Variance for the Quality of Principal's Relationship with the Superintendent by Years Served in Present School*

Years served in present school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	480	1.86	1.071		
6-10	203	1.91	1.197		
11+	203	1.94	1.084		
Total	886	1.89	1.103	.410	.664

Table 59

*Analysis of Variance for the Quality of Principal's Relationship with the Superintendent by Type of School*

Type of school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	444	1.87	1.078		
6 -10	158	1.94	1.119		
11+	284	1.88	1.136		
Total	886	1.89	1.103	.234	.791

The results of a one-way ANOVA, reported in Table 59 indicated no statistically significant difference between type of school and job satisfaction with the quality of the relationship with the superintendent ( $F(2, 883) = .234, p > .791$ ). The data indicated that the principals' job satisfaction with the quality of their relationship with the superintendent was unaffected by type of school.

Factor 19. Process the superintendent uses to evaluate principals.

The highest scores were observed for male principals ( $M = 2.41, SD = 1.171$ ), for principals who served 31 or more years in the principalship ( $M = 2.25, SD = 1.266$ ), for principals serving in their present schools 11 or more years ( $M = 2.37, SD = 1.144$ ), and for high school principals ( $M = 2.41, SD = 1.184$ ). All of the highest scores fell within the *moderately satisfied* range on the questionnaire scale (2.00-2.99).

The lowest scores were observed for female principals ( $M = 2.58, SD = 1.206$ ), for principals who served 16-20 years in the principalship ( $M = 2.55, SD = 1.278$ ), for principals serving in their present schools 6-10 years ( $M = 2.52, SD = 1.179$ ), and for middle/junior high school principals ( $M = 2.52, SD = 1.153$ ). All of these lowest scores fell within *moderately satisfied* range on the questionnaire scale (2.00-2.99).

The independent *t*-tests indicated no significant difference,  $t(875) = -1.893, p = > .059$ , for the process the superintendent uses to evaluate a principal between males ( $M = 2.41$ ) and females ( $M = 2.58$ ). These results indicated that job satisfaction with the process the superintendent uses to evaluate principals was not influenced by the sex of the principals.

The results of one-way ANOVA are reported in Table 60. The analysis of variance indicated no statistically significant differences between years served as a principal and job satisfaction with the process superintendents use to evaluate principals  $F(6, 871) = .498, p > .05$ . These data indicated that job satisfaction with the process the superintendent uses to evaluate principals was unaffected by the principals' years served in the principalship.

Table 60

*Analysis of Variance for the Process the Superintendent Uses to Evaluate Principals by Years Served as a Principal*

Years served as a principal	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	274	2.46	1.264		
6-10	187	2.45	1.078		
11-15	165	2.53	1.166		
16-20	92	2.55	1.278		
21-25	67	2.37	1.126		
26-30	64	2.34	1.042		
31+	28	2.25	1.266		
Total	877	2.46	1.182	.498	.810

The results of a one-way ANOVA are presented in the Table 61. The analysis of variance indicated no statistically significant differences between years in present school and job satisfaction with the process the superintendent uses to evaluate principals  $F(877) = .824, p > .05$ . These results indicated that job satisfaction with the process the superintendent uses to evaluate principals as unaffected by years served in the present school.

Table 61

*Analysis of Variance for the Process the Superintendent Uses to Evaluate Principals by Years Served in Present School*

Years served in present school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	476	2.47	1.199		
6-10	201	2.52	1.179		
11+	202	2.37	1.144		
Total	879	2.46	1.182	.824	.439

Table 62

*Analysis of Variance for the Process the Superintendent Uses to Evaluate Principals by Type of School*

Type of school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Elementary	440	2.47	1.192		
Middle/Junior High	155	2.52	1.153		
High	284	2.41	1.184		
Total	879	2.46	1.182	.461	.631

The results of a one-way ANOVA are reported in Table 62. The analysis of variance indicated no statistically significant differences between type of school and the process the superintendent uses to evaluate principals  $F(2, 876) = .461, p > .05$ . These results indicated that job satisfaction with the process a superintendent uses to evaluate principals was unaffected by type of school.

#### Chapter 4 - 2005 Study

The population for the 2005 study was a sample of 300 Iowa elementary, middle/junior high, and high school principals stratified by random sampling in order to obtain the needed information about their level of job satisfaction. The list of persons with K-12 endorsements employed in Iowa public schools as principals in 2005 was obtained from the database of the Iowa Department of Education. This list of principals was checked for omissions, duplicate entries, and other inaccuracies to avoid coverage errors. In 2005 64.3% of the principals responded to the survey.

The majority of the respondents in 2005 study were male (65.8%) while 34.2% were female. Nearly all principals were white (98.4) except other racial/ethnic groups representing African-American (1.1%), Hispanic (.5%). In age categories 71.5% of the principals were 41-60 years old while 25.9% were bellow 40 and only 2.6% above 60.

Forty-four percent of the respondents were principals in schools with between 300 and 599 students. Thirty-five percent served in schools of 600 pupils or more while 24.4% were at schools with less than 300 students enrolled.

More than half of the respondent (51.3%) had served as a principal for 1-10 years and 31.6% had served 11-20 years. Thirteen and half percent served 21-30 years and only 3.6% of the respondents had served more than 30 years.

Considering their experience in their present school, more than half of the principals (51.3%) had served 1-5 years, 25.9% had served 6-10 years and 22.8% had served more than 10 years.

Just under half of the respondents (45.6%) were employed in elementary schools, with 25.4% working in middle schools, and 29% were principals in high schools.

Table 63

*Demographic Characteristics of Respondents*

Characteristics	Number	Percentage
Sex	127	65.8
Male	66	34.2
Female	193	100.0
Total		
Years served as a principal	Number	Percentage
1 – 5	51	26.4
6 – 10	48	24.9
11 – 15	37	19.2
16 – 20	24	12.4
21 – 25	16	8.3
26 – 30	10	5.2
31 +	7	3.6
Total	193	100.0
Years served in present school	Number	Percentage
1 - 5	99	51.3
6 – 10	50	25.9
11 +	44	22.8
Total	193	100.0
Type of school	Number	Percentage
Elementary	88	45.6
Middle/Junior High	49	25.4
High	56	29.0
Total	193	100.0

### Iowa Questionnaire Scale Analysis

The questionnaire scale analysis contains 19 items that measure specific factors of job satisfaction. One specific question is intended to measure overall job satisfaction. The respondents were asked to indicate their level of satisfaction or dissatisfaction by checking an item corresponding to one of the five categories on a 5 – point Likert scale: 1 (*very satisfied*), 2 (*moderately satisfied*), 3 (*neutral*), 4 (*moderately dissatisfied*), 5 (*very dissatisfied*).

### Research Question 1

What is the overall level of job satisfaction of Iowa public school principals?

The results for this question showed that the calculated mean ( $M$ ) and standard deviation ( $SD$ ) for respondents in the 2005 study was ( $M = 1.90$ ) with ( $SD = .747$ ). The number of respondents was 193. The mean for the respondents fell within the *very satisfied* range on the scale ( $1.00 - 1.99 = \text{very satisfied}$ ), ( $2.00 - 2.99 = \text{moderately satisfied}$ ), ( $3.00 - 3.99 = \text{neutral}$ ), ( $4.00 - 4.99 = \text{moderately dissatisfied}$ ), ( $5.00 = \text{very dissatisfied}$ ).

Sub-Question a: What is the overall level of job satisfaction according to sex, years served as principal, years served in present school, and type of school?

The number of respondents ( $N$ ), the mean ( $M$ ), and standard deviation ( $SD$ ), ( $F$ ) for ANOVA a ( $p$ ) value for each groups are shown in Table 1.

The highest overall job satisfaction scores were observed for females ( $M = 1.89$ ,  $SD = .767$ ), for principals with 1 – 5 years experience in the principalship ( $M = 1.80$ ,  $SD = .566$ ), for principals serving in their present school 6 – 10 years ( $M = 1.88$ ,  $SD = .746$ )

and 11 or more years ( $M = 1.88$ ,  $SD = .654$ ), and for principals from middle/junior high school ( $M = 1.85$ ,  $SD = .577$ ). All of these scores fell within a 1.00 and 1.99 range on the questionnaire scale indicating that principals were *very satisfied*.

The lowest overall satisfaction scores were observed for males ( $M = 1.91$ ,  $SD = .739$ ), for principals with 31 or more years experience in the principalship ( $M = 2.28$ ,  $SD = 1.383$ ), for principals serving in their present school 1-5 years ( $M = 1.91$ ,  $SD = .791$ ), and for high school principals ( $M = 1.94$ ,  $SD = .792$ ). Three of these score fell within the *very satisfied* range on the questionnaire scale (1.00-1.99). One of the scores fell within *moderately satisfied* range on the questionnaire scale (2.00-2.99).

The independent  $t$ -test indicated no significant difference  $t(191) = .102$ ,  $p > .919$  in overall job satisfaction between males ( $M = 1.91$ ) and females ( $M = 1.89$ ). These results indicated that overall job satisfaction was unaffected by the sex of the principals.

Table 64

*Analysis of Variance for Overall Job Satisfaction by Years Served as a Principal*

Years served as a principal	$N$	$M$	$SD$	$F$	$p$
1-5	51	1.80	.566		
6-10	48	1.83	.807		
11-15	37	1.86	.751		
16-20	24	2.04	.907		
21-25	16	2.00	.365		
26-30	10	2.10	.737		
31 +	7	2.28	1.383		
Total	193	1.90	.746	.836	.544



The results of a one-way ANOVA in Table 64 showed no statistical significance between years served as a principal and overall job satisfaction  $t(6, 186), = .836, p > .05$ . These results indicated that the overall job satisfaction was unaffected by the years principals had served in the principalship.

Table 65

*Analysis of Variance for Overall Job Satisfaction by Years Served in Present School*

Years served in present School	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	99	1.91	.791		
6-10	50	1.88	.746		
11 +	44	1.88	.654		
Total	193	1.901	.746	.057	.945

Table 65 results of one-way ANOVA reported no significant differences between overall job satisfaction and years served in present school  $F(2, 190) = .057, p > .05$ . These results indicated that the overall job satisfaction was unaffected by the years a principal served in the present school.

The results of one-way ANOVA reported in Table 66 indicated no statistical significance between overall job satisfaction and type of school  $(2, 190) = .187, p > .829$ . This variable did not affect the overall level of job satisfaction.

Table 66

*Analysis of Variance for Overall Job Satisfaction by Type of School*

Type of school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Elementary	88	1.89	.817		
Middle/Junior High	49	1.85	.577		
High	56	1.94	.772		
Total	193	1.90	.746	.187	.829

Sub-Question b: What is the level of job satisfaction on each of the 20 factors for Iowa public school principals?

The top three ranked levels of satisfaction were (a) relationship with the teachers of your school ( $M = 1.57$ ,  $SD = .718$ ), (b) relationship with the parents of your school ( $M = 1.71$ ,  $SD = .674$ ), (c) the quality of your relationship with the superintendent ( $M = 1.77$ ,  $SD = 1.054$ ). The mean score concerning these factors fell within the *very satisfied* range on the questionnaire scale (1.00 – 1.99).

The three lowest factors were (a) time available that puts balance in your life ( $M = .3.49$ ,  $SD = 1.071$ ); (b) time spent on management tasks ( $M = 3.05$ ,  $SD = 1.009$ ) and leadership activities ( $M = 3.05$ ,  $SD = 1.071$ ); and (c) extracurricular activities placed on you as a principal ( $M = 2.90$ ,  $SD = 1.179$ ). The mean score concerning these factors fell within the *moderately satisfied* and the *neutral* ranges on the questionnaire scale.

Sub-Question c: What is the satisfaction level for each of the 20 factors according to sex, years served as principal, years served in present school, and type of school?

To answer this question it was necessary to use the same procedure as in the 1999 study. The results are tabulated and labeled. Each of the tables shows demographic variables, the numbers (*N*) of respondents for each group, the means (*M*), the standard

Table 67

*Job Satisfaction Factors*

Factor	<i>N</i>	<i>M</i>	<i>SD</i>
1. The sense of accomplishment you receive from your work.	193	1.79	.828
2. Professional growth opportunities provided for you.	193	2.11	.930
3. The adequacy of administrative support provide for you.	193	2.31	.906
4. The adequacy of support services provided for you.	193	2.45	1.020
5. Community demands placed on you as principal.	193	2.58	1.023
6. Extracurricular demands placed on you as a principal.	193	2.90	1.179
7. Time available for activities that put balance in your life.	193	3.49	1.071
8. Relationship with the administrative team/cabinet.	193	1.81	1.083
9. Relationship with the boards of education.	193	1.98	.674
10. Relationship with the parents of your school.	193	1.71	.674
11. Relationship with the teachers of your school.	193	1.57	.718
12. The consistency of the board in making decisions in the best interest of students.	193	2.07	1.126
13. How well the board of education acknowledges your accomplishments.	193	2.51	1.275
14. Annual salary	193	2.63	1.275

(table continues)

Factor	<i>N</i>	<i>M</i>	<i>SD</i>
15. The community's image of school Administrators.	193	2.48	1.041
16. Time spent on management tasks.	193	3.05	1.051
17. Time spent on leadership activities.	193	3.05	1.054
18. The quality of your relationship with the superintendent.	193	1.77	1.054
19. The process the superintendent uses to evaluate principals.	193	2.19	1.066
20. All things considered, indicate your overall level of job satisfaction.	193	1.90	.746

deviation (*SD*) for each group, *t*-values, *F* ratio (*F*), and significance (*p*) of each variable.

If it was necessary, a post hoc test followed each table in order to identify groups that differed. The results of post hoc tests are provided in narrative form.

An independent *t*-test was used to test demographic variable sex of the principal.

The *t*-test was used to analyze whether the proportion of males and females was different.

The results are provided in narrative form.

A one-way ANOVA was conducted to test for significant differences between groups regarding the principals' years served as principals, years served in their present school, and type of school. Where the *F* test was significant, Scheffé post hoc tests were conducted to identify groups that differed. Cohen's *d* effect size was computed as an indicator of how strong and how important the results were.

#### Factor 1. Sense of accomplishment you receive from your work.

The highest satisfaction scores for this factor were observed for females (*M* = 1.68, *SD* = .660), for principals with 21 – 25 years of experience in the principalship (*M* =

1.62,  $SD = .619$ ), for principals serving in their present school 11 or more years ( $M = 1.68$ ,  $SD = .770$ ), and for elementary school principals ( $M = 1.67$ ,  $SD = .753$ ). All of these highest scores fell within the 1.00 and 1.99 range on the questionnaire scale indicating that the principals were *very satisfied* with the sense of accomplishment they receive from their work.

The lowest satisfaction scores were observed for males ( $M = 1.85$ ,  $SD = .900$ ), for principals with 31 and more years of experience in the principalship ( $M = 2.14$ ,  $SD = 1.573$ ), for principals serving in their present schools 1 – 5 years ( $M = 1.87$ ,  $SD = .895$ ), and for high school principals ( $M = 2.00$ ,  $SD = .990$ ). Two of these lowest scores fell within a 1 - 1.99 range and the next two scores fell within the 2.00 - 2.99 range on the questionnaire scale indicating that the principals were *very satisfied* and *moderately satisfied* with the sense of accomplishment they receive from their work.

The independent  $t$ -test indicated no statistically significant differences  $t(191)$ , = 1.344,  $p = .181$ , for job satisfaction with the sense of accomplishment between males ( $M = 1.85$ ,  $SD = .900$ ) and females ( $M = 1.68$ ,  $SD = .660$ ). These results indicated that job satisfaction with the sense of accomplishment principals received from their work was unaffected by the sex of the principals.

In Table 68 the results of a one-way ANOVA indicated no significant difference for job satisfaction with the sense of accomplishment principals received from their work and the number of years served as a principal  $F(6, 186)$ , = .725,  $p > .05$ . These results indicated that this factor did not affect job satisfaction.

Table 68

*Analysis of Variance for the Sense of Accomplishment Principal Receives from Work by Years Served as a Principal*

Years served as a principal	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	51	1.94	.881		
6-10	48	1.72	.764		
11-15	37	1.70	.776		
16-20	24	1.79	.883		
21-25	16	1.62	.619		
26-30	10	1.70	.483		
31 +	7	2.14	1.573		
Total	193	1.79	.828	.725	.630

Table 69

*Analysis of Variance for the Sense of Accomplishment a Principal Receives from Work by Years Served in Present School*

Years served in present School	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	99	1.87	.895		
6-10	50	1.72	.729		
11 +	44	1.68	.770		
Total	193	1.79	.828	1.123	.327

The results of a one-way ANOVA in Table 69 indicated no statistically significant difference between job satisfaction with the sense of accomplishment principals received from their work and the number of years in their present school  $F(2, 190), = 1.123, p > .05$ , showing that this factor did not affect job satisfaction.

Table 70

*Analysis of Variance for the Sense of Accomplishment Principal Receives from Work by Type of School*

Type of school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Elementary	88	1.67	.753		
Middle/Junior High	49	1.77	.714		
High	56	2.00	.990		
Total	193	1.79	.828	2.773	.065

The results of one-way ANOVA are reported in Table 70. The analysis of variance indicated no statistically significant difference between job satisfaction with the sense of accomplishment a principal receives from the work and type of school  $F(2, 190), = 2.773, p > .05$ . These results indicated that principals' job satisfaction with sense of accomplishment was unaffected by type of school.

#### Factor 2. Professional Growth Opportunities for Principals.

The highest satisfaction scores were observed for females ( $M = 2.09, SD = .972$ ), for principals with 11 – 15 years experience in the principalship ( $M = 2.00, SD = .942$ ) and 16 – 20 years ( $M = 2.00, SD = 1.021$ ), for principals serving in their present school 11 or more years ( $M = 1.95, SD = .888$ ), and for elementary principals ( $M = 2.07, SD = .961$ ). Three of the highest scores fell within the 2.00 and 2.99 on the questionnaire scale indicating principals were *moderately satisfied* with professional growth opportunities. One score fell within the 1.00 and 1.99 range indicating that the principals were *very satisfied* with professional growth opportunities.

The lowest satisfaction scores were observed for males ( $M = 2.13$ ,  $SD = .911$ ), for principals with 26 – 30 years experience in the principalship ( $M = 2.50$ ,  $SD = .707$ ), for principals serving in their present school 6 – 10 years ( $M = 2.22$ ,  $SD = .887$ ), and for high school principals ( $M = 2.21$ ,  $SD = .928$ ). All of these lowest scores fell within the 2.00 = 2.99 range on the questionnaire scale indicating that principals were *moderately satisfied* with the professional growth opportunities.

The independent  $t$ -test indicated no significant difference  $t(191) = .303$ ,  $p > .762$ ., between males ( $M = 2.13$ ,  $SD = .911$ ) and females ( $M = 2.09$ ,  $SD = .972$ ), demonstrating that sex of principals does not affect this factor for job satisfaction.

Table 71

*Analysis of Variance for the Professional Growth Opportunity Provided for Principal by Years Served as a Principal*

Years served as a principal	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	51	2.09	.943		
6-10	48	2.20	.797		
11-15	37	2.00	.942		
16-20	24	2.00	1.021		
21-25	16	2.06	.928		
26-30	10	2.50	.707		
31 +	7	2.28	1.603		
Total	193	2.11	.930	.563	.759

Table 71 results of a one-way ANOVA indicate no significant difference between principals based on the number of years served as a principal and the professional growth opportunities  $F(6,186) = .563$ ,  $p > .05$ . Data indicated that job



satisfaction with professional growth opportunities was not impacted by years served as a principal.

The results of one-way ANOVA reported in Table 72 indicated no significant differences between principals serving a specified number of years in their present

Table 72

*Analysis of Variance for the Professional Growth Opportunity Provided for Principal by Years Served in Present School*

Years served in present school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	99	2.14	.969		
6-10	50	2.22	.887		
11 +	44	1.95	.888		
Total	193	2.11	.930	.1010	.366

schools and job satisfaction with professional growth opportunities  $F(2, 190) = .1010$ ,  $p > .05$ . This showed that job satisfaction with professional growth opportunities was unaffected by the years principals served in their present schools.

Table 73

*Analysis of Variance for the Professional Growth Opportunity Provided for Principal by Type of School*

Type of school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Elementary	88	2.07	.961		
Middle/Junior high	49	2.08	.885		
High	56	2.21	.928		
Total	193	2.11	.930	.410	.664

The results of one-way ANOVA as reported in Table 73 indicated no significant difference between job satisfaction with professional growth opportunities for principals and the type of school  $F(2, 190) = .410, p > .05$ . Therefore, type of school did not impact job satisfaction with professional growth opportunities.

Factor 3. The Adequacy of Administrative Support Provided for Principals.

The highest satisfaction scores were seen for males ( $M = 2.40, SD = .961$ ), for principals with 21-25 years experience in the principalship ( $M = 2.06, SD = .680$ ), for principals serving in their present school 11 or more years ( $M = 2.11, SD = .813$ ), and for middle/junior high school principals ( $M = 2.22, SD = .872$ ). All of these highest scores fell within the 2.00-2.99 range on the questionnaire scale indicating that principals were *moderately satisfied* with the adequacy of administrative support.

The lowest satisfaction scores were for females ( $M = 2.56, SD = 1.12$ ), for principals with 26-30 years experience in the principalship ( $M = 2.60, SD = .999$ ), for principals serving in their present school 1- 5 years ( $M = 2.40, SD = .924$ ), and for high school principals ( $M = 2.37, SD = .743$ ). These lowest scores fell within a 2.00 – 2.99 range on the questionnaire scale indicating that the principals were *moderately satisfied* with the adequacy of administrative support provided for principals.

An independent  $t$ -test indicated no significant difference  $t(191) = 6.23, p = .535$ , on the adequacy of administrative support provided between males ( $M = 2.40, SD = .961$ ) and females ( $M = 2.56, SD = 1.12$ ). These data indicated that job satisfaction regarding the adequacy of administrative support provided for principals was not influenced by sex.

Table 74 results of a one-way ANOVA showed no significant differences between years served as a principal and adequacy of administrative support.  $F(6, 186) = .555$ ,  $p > .05$ . This variable did not affect job satisfaction.

Table 74

*Analysis of Variance for the Adequacy of Administrative Support Provided for Principal by Years Served as a Principal*

Years served as a principal	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	51	2.33	.816		
6-10	48	2.33	.833		
11-15	37	2.21	.946		
16-20	24	2.37	1.209		
21-25	16	2.06	.680		
26-30	10	2.60	.699		
31 +	7	2.57	1.397		
Total	193	2.3	.906	.555	.766

Table 75

*Analysis of Variance for the Adequacy of Administrative Support Provided for Principal by Years in Present School*

Years served in present school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	99	2.40	.924		
6-10	50	2.32	.935		
11 +	44	2.11	.813		
Total	193	2.31	.906	1.574	.210

In Table 75 the results of a one-way ANOVA indicated no significant differences between job satisfaction of administrative support and years served in present school  $F(2, 190) = 1.574$ ,  $p > .05$ . The data indicated that the factor did not impact job satisfaction with the adequacy of administrative support.

Table 76

*Analysis of Variance for the Adequacy of Administrative Support Provided for Principal by Type of School*

Type of school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Elementary	88	2.32	.967		
Middle/Junior High	49	2.22	.872		
High	56	2.37	.843		
Total	193	2.31	.906	.376	.687

The results of one-way ANOVA are reported in Table 76. The analysis of variance indicated no statistically significant difference between adequacy of administrative support and type of school  $F(2, 190) = .376$ ,  $p > .05$ . Again, type of school did not impact job satisfaction with the adequacy of administrative support.

Factor 4. Adequacy of support services provided for principals.

The highest satisfaction scores were observed for males ( $M = 2.40$ ,  $SD = .961$ ), for principals with 21-25 years experience in the principalship ( $M = 2.18$ ,  $SD = .750$ ), for principals serving in their present school more than 11 years ( $M = 2.31$ ,  $SD = .958$ ), and for middle/junior high school principals ( $M = 2.34$ ,  $SD = 1.011$ ). All of these highest

scores fell within the 2.00-2.99 range on the questionnaire scale indicating that principals were *moderately satisfied* with the adequacy of support services.

The lowest satisfaction scores were seen for females ( $M = 2.56$ ,  $SD = .138$ ), for principals with 26-30 years experience in the principalship ( $M = 3.00$ ,  $SD = .942$ ), for principals serving in their present school 1-5 years ( $M = 2.51$ ,  $SD = 1.053$ ), and for elementary principals ( $M = 2.54$ ,  $SD = 1.016$ ). Three of these lowest scores fell within the 2.00-2.99 range, indicating that principals were *moderately satisfied* with the adequacy of support services. One score fell within 3.00-3.99 range on the questionnaire scale.

Principals were *neutral* with the adequacy of support services provided.

The independent  $t$ -test indicated no significant difference,  $t(191) = -.978$ ,  $p > .330$ , in results between males ( $M = 2.40$ ,  $SD = .961$ ) and females ( $M = 2.56$ ,  $SD = .138$ ). These results indicated that job satisfaction with the adequacy of support services provided for principals was not impacted by the sex of the principals.

Table 77

*Analysis of Variance for the Adequacy of Support Services Provided for Principal by Years Served as a Principal*

Years served as A principal	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	51	2.43	.984		
6-10	48	2.41	.985		
11-15	37	2.37	1.036		
16-20	24	2.58	1.212		
21-25	16	2.18	.750		
26-30	10	3.00	.942		
31 +	7	2.71	1.380		
Total	193	2.45	1.020	.844	.538

Table 77 reports the results of one-way ANOVA. The data showed no significant difference between job satisfaction with adequacy of support services and a principal's years served as a principal  $F(6, 186) = .844, p > .05$ , indicating that job satisfaction with the adequacy of support services provided was not impacted by this factor.

Table 78

*Analysis of Variance for the Adequacy of Support Services Provided for Principal by Years Served in Present School*

Years served in present school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	99	2.51	1.053		
6-10	50	2.46	1.014		
11 +	44	2.31	.958		
Total	193	2.45	1.020	.566	.569

The results of a one-way ANOVA in Table 78 indicated no significant difference between job satisfaction with the adequacy of support services and the number of years served in present school  $F(2, 190) = .566, p > .05$ . These results indicated this factor did not influence satisfaction with the adequacy of support services provided for principals

The one-way ANOVA results reported in Table 79 indicated no significant differences in job satisfaction with the adequacy of support services provided for principals and type of school  $F(2, 190) = .671, p > .05$ . The data indicated that type of school did not impact job satisfaction with the adequacy of support services provided for principals.

Table 79

*Analysis of Variance for the Adequacy of Support Services Provided for Principal by Type of School*

Type of school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Elementary	88	2.54	1.016		
Middle/Junior High	49	2.34	1.011		
High	56	2.41	1.040		
Total	193	2.45	1.020	.671	.512

Factor 5. Community demands placed on you as a principal outside of the school.

The highest satisfaction scores were observed for females ( $M = 2.56$ ,  $SD = 1.039$ ), for principals with 21-25 years of experience in the principalship, ( $M = 2.25$ ,  $SD = .774$ ), for principals serving in their present school 6 -10 years ( $M = 2.44$ ,  $SD = .860$ ), and for middle/junior high school principals ( $M = 2.36$ ,  $SD = .667$ ). All of these highest scores fell within the 2.00-2.99 range on the questionnaire scale indicating that principals were *moderately satisfied* with the community demands placed on them outside of the schools.

The lowest satisfaction scores were observed for males ( $M = 2.59$ ,  $SD = 1.018$ ), for principals with 31 and more years experience in the principalship ( $M = 3.14$ ,  $SD = 1.345$ ), for principals serving in their present school 1-5 years ( $M = 2.64$ ,  $SD = 1.033$ ), and for high school principals ( $M = 2.89$ ,  $SD = 1.139$ ). Three of these lowest scores fell within the 2.00-2.99 score range, indicating that these principals were *moderately satisfied* with community demands placed on them outside of the school. One score fell within the 3.00-3.99 range on the questionnaire scale. These principals were *neutral* with community demands placed on them outside of the school.

The independent  $t$ -test indicated no significant difference,  $t(191) = .192, p > .848$ , in results between males ( $M = 2.59, SD = 1.018$ ) and females ( $M = 2.56, SD = 1.039$ ). This indicated that job satisfaction with community demands placed on principals was not impacted by the sex of the principals.

Table 80

*Analysis of Variance for Community Demands Placed on Principal Outside of the School by Years Served as a Principal*

Years served as a principal	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	51	2.68	.969		
6-10	48	2.52	.922		
11-15	37	2.51	1.169		
16-20	24	2.66	1.090		
21-25	16	2.25	.774		
26-30	10	2.50	1.178		
31 +	7	3.14	1.345		
Total	193	2.58	1.023	.809	.564

Table 80 results of a one-way ANOVA indicated no statistical significance between job satisfaction regarding community demands and the number of years served as a principal  $F(6, 186) = .809, p > .05$ . This indicated that the variable did not impact job satisfaction with community demands placed on a principal outside of the school.

Table 81 reports the results of one-way ANOVA indicating no statistical significant difference for job satisfaction with community demands placed on principals and years served in their present school  $F(2, 190) = .677, p > .05$ . These results



demonstrated no impact from this factor on job satisfaction with community demands placed on principal outside of the school.

Table 81

*Analysis of Variance for Community Demands Placed on Principal Outside of the School by Years Served in Present School*

Years in present school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	99	2.64	1.033		
6-10	50	2.44	.860		
11 +	44	2.59	1.167		
Total	193	2.58	1.023	.677	.509

Table 82

*Analysis of Variance for Community Demands Placed on Principal Outside of the School by Type of School*

Type of school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Elementary	88	2.50	1.072		
Middle/Junior High	49	2.36	.667		
High	56	2.89	1.139		
Total	193	2.58	1.023	4.071	.019*

\* The mean is significant at the .05 level (2-tailed)

The results of one-way ANOVA reported in Table 82 indicated a statistically significant difference for community demands placed on principals outside of school and school type  $F(2,190) = 4.071$ ,  $p < .05$ . A Scheffe post hoc test indicated a statistically significant difference between the means of middle/junior high and high school principals

( $p = .030$ ). Middle/junior high school principals ( $M = 2.36$ ,  $SD = .667$ ) were more satisfied with the community demands than high school principals ( $M = 2.89$ ,  $SD = 1.139$ ), with a moderate effect size  $d = .58$ .

Factor 6. Extracurricular demands placed on principals.

The highest job satisfaction scores were observed for females ( $M = 2.74$ ,  $SD = 1.193$ ), for principals with 6-10 years experience in the principalship ( $M = 2.72$ ,  $SD = .961$ ), for principals serving in their present school 1-5 years ( $M = 2.83$ ,  $SD = 1.131$ ), and for principals from elementary schools ( $M = 2.57$ ,  $SD = 1.141$ ). All of these highest scores fell within the *moderately satisfied* range on the questionnaire scale (2.00 – 2.99).

The lowest job satisfaction scores were seen for males ( $M = 2.98$ ,  $SD = 1.168$ ), for principals who served as principals 31 or more years ( $M = 3.57$ ,  $SD = 1.133$ ), for principals serving in their present school 11 or more years ( $M = 3.09$ ,  $SD = 1.360$ ), and for high school principals ( $M = 3.35$ ,  $SD = 1.242$ ). Three of these lowest scores fell within the *neutral* range on the questionnaire scale (3.00-3.99) with one score falling in the moderately satisfied range on the questionnaire scale (2.00-2.99).

The independent  $t$ -test indicated no significant difference,  $t(191) = 1.354$ ,  $p > .177$ , for extracurricular demands placed on principals between males ( $M = 2.98$ ) and females ( $M = 2.74$ ). These results indicated that job satisfaction with extracurricular demands placed on principals was not impacted by the sex of the principals.

The results of one-way ANOVA are reported in Table 83. These data indicated no significant difference between extracurricular demands placed on a principal and the

Table 83

*Analysis of Variance for Extracurricular Demands Placed on You as a Principal Outside of the School by Years Served as a Principal*

Years served as a principal	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	51	2.76	1.193		
6-10	48	2.72	.961		
11-15	37	2.97	1.322		
16-20	24	3.12	1.392		
21-25	16	3.12	1.087		
26-30	10	2.80	1.135		
31 +	7	3.57	1.133		
Total	193	2.90	1.179	.934	.472

years served as a principal  $F(6, 186) = .934$ ,  $p > .472$ . These results indicated that job satisfaction with extracurricular activities placed on a principal were unaffected by the number of years served as a principal. The results of a one-way ANOVA reported in Table 84 indicated no statistical significance between years served in present school and extracurricular demand placed on principals  $F(2, 190) = .738$ ,  $p > .05$ . These results indicated this variable did not impact job satisfaction with extracurricular demands placed on principals.

Table 85 reports the results of a one-way ANOVA. The analysis of variance indicated statistical significant differences between extracurricular demands placed on principals and type of school  $F(2, 190) = 8.068$ ,  $p < .001$ . A Scheffe post hoc test indicated significant differences between means for elementary and high school principals ( $p = .001$ ), with a moderate effect size  $d = -.65$ . Elementary principals ( $M =$

2.57) seemed to have been more satisfied with extracurricular activities than high school principals ( $M = 3.35$ ).

Table 84

*Analysis of Variance for Extracurricular Demands Placed on You as a Principal by Years Served in Present School*

Years served in present school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	99	2.83	1.131		
6-10	50	2.86	1.106		
11 +	44	3.09	1.360		
Total	193	2.90	1.179	.738	.479

Table 85

*Analysis of Variance for Extracurricular Demands Placed on You as a Principal by Type of School*

Type of school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Elementary	88	2.57	1.141		
Middle/Junior High	49	2.95	.999		
High	56	3.35	1.242		
Total	193	2.90	1.179	8.068	.000*

\* Mean is significant at the .05 level (2-tailed).

Factor 7. Time available for activities that put balance in principal's life.

The highest satisfaction scores were observed for female principals ( $M = 3.48$ ,  $SD = 1.205$ ), for principals with 11-15 years of experience in the principalship ( $M = 3.18$ ,  $SD = 1.287$ ), for principals serving in their present schools 6-10 years ( $M = 3.36$ ,  $SD =$

1.005), and for middle/junior high school principals ( $M = 3.14$ ,  $SD = 1.080$ ). All of the highest scores fell within the *neutral* range on the questionnaire scale (.3.00-3.99).

The lowest satisfaction scores were observed for male principals ( $M = 3.50$ ,  $SD = .999$ ), for principals with 31 or more years of experience in the principalship ( $M = 3.85$ ,  $SD = .889$ ), for principals serving 1-5 years ( $M = 3.57$ ,  $SD = 1.031$ ), and for high school principals ( $M = 3.80$ ,  $SD = .961$ ). All of these lowest scores fell within the *neutral* range on the questionnaire scale (3.00-3.99).

The independent *t*-test indicated no significant difference  $t(191) = .110$ ,  $p > .912$ , for job satisfaction with time available for activities that put balance in the life of principals between males ( $M = 3.50$ ) and females ( $M = 3.48$ ), indicating that the time available for activities that put balance in the life of principals was not impacted by the sex of the principals.

The results of one-way ANOVA in Table 86 reported no significant difference between time available that put balance in the life of principals and years served as a principal  $F(6, 186)$ ,  $= 1.283$ ,  $p > .05$ . These results indicated that job satisfaction on this factor was not affected by years served as a principal.

The results of one-way ANOVA reported in Table 87 showed no significant difference for the number of years principals served in their present school and time available that put balance in the life of a principal  $F(2, 190)$ ,  $= .682$ ,  $p > .05$ . These results indicated no impact from this variable on job satisfaction with time available to put balance in the life of principals.

Table 86

*Analysis of Variance for Time Available for Activities that Put Balance in Principal's*

*Life by Years Served as a Principal*

Years served as a principal	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	51	3.64	.976		
6-10	48	3.35	.978		
11-15	37	3.18	1.287		
16-20	24	3.75	1.073		
21-25	16	3.68	.946		
26-30	10	3.40	1.264		
31 +	7	3.85	.899		
Total	193	3.49	1.071	1.283	.267

Table 87

*Analysis of Variance for Time Available for Activities that Put Balance in Principal's*

*Life by Years Served in Present School*

Years in present school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	99	3.57	1.031		
6-10	50	3.36	1.005		
11 +	44	3.47	1.229		
Total	193	3.49	1.071	.682	.507

In Table 88 the results of one-way ANOVA reported a statistically significant difference between type of school and time available that put balance in the life of principals  $F(2, 190), = 5.190, p < .05$ . A Scheffé post hoc test indicated significant differences between the means of middle/junior high school principals and high school principals ( $p = .006$ ), with a moderate effect size  $d = -.64$ .

Table 88

*Analysis of Variance for Time Available that Put Balance in Principal's Life by Type of School*

Type of school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Elementary	88	3.50	1.082		
Middle/Junior High	49	3.14	1.080		
High	56	3.80	.961		
Total	193	3.49	1.071	5.190	.006*

\* The mean is significant at the .05 level (2-tailed).

#### Factor 8. Relationship with the administrative team/cabinet.

The highest satisfaction scores were observed for males ( $M = 1.72$ ,  $SD = 1.044$ ), for principals with 6-10 years in the principalship ( $M = 1.56$ ,  $SD = .920$ ), for principals serving in their present schools 1-5 years ( $M = 1.68$ ,  $SD = .932$ ), and for middle/junior high school principals ( $M = 1.77$ ,  $SD = 1.065$ ). All of these highest scores fell within the *very satisfied* range on the questionnaire scale (1.00-1.99).

The lowest satisfaction scores were observed for females ( $M = 1.98$ ,  $SD = 1.143$ ), for principals with 26-30 years of experience in the principalship ( $M = 2.40$ ,  $SD = 1.505$ ), for principals serving in their present school 6-10 years ( $M = 2.00$ ,  $SD = 1.142$ ), and for elementary school principals ( $M = 1.85$ ,  $SD = 1.150$ ). Two of these lowest scores fell within the *very satisfied* range on the questionnaire scale (1.00-1.99) and two of the scores fell within the *moderately satisfied* range on the questionnaire scale 2.00-2.00.

The independent *t*-test indicated no significant differences,  $t(191) = -1.591$ ,  $p > .113$ , for job satisfaction with relationship to the administrative team/cabinet between

males ( $M = 1.72$ ) and females ( $M = 1.98$ ). These results indicated sex of the principals did not affect job satisfaction with the administrative team/cabinet.

Table 89

*Analysis of Variance for the Relationship with the Administrative Team/Cabinet by Years Served as a Principal*

Years served as a principal	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	51	1.66	.930		
6-10	48	1.56	.920		
11-15	37	2.21	1.181		
16-20	24	1.70	.954		
21-25	16	1.68	1.250		
26-30	10	2.40	1.505		
31 +	7	2.28	1.380		
Total	193	1.81	1.083	2.313	.035*

\* The mean is significant at the .05 level (2-tailed).

The results of one-way ANOVA are reported in Table 89. The data indicated a statistically significant difference for principals' years served as principals and the relationship with the administrative team/cabinet ( $F(6, 186) = 2.313, p < .05$ ). However, a Scheffé post hoc test did not reveal any significant differences among the means of the groups.

The results for one-way ANOVA reported in Table 90 indicated no significant difference for number of years served in the present school and the principals' relationship with the administrative team/cabinet  $F(2, 190) = 1.525, p > .05$ . These results showed that job satisfaction with the administrative team/cabinet was not affected by the number of years a principal served in the present school.



Table 90

*Analysis of Variance for the Relationship with the Administrative Team/Cabinet by Years Served in Present School*

Years served in present school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	99	1.68	.932		
6-10	50	2.00	1.142		
11 +	44	1.88	1.297		
Total	193	1.81	1.083	1.525	.220

In Table 91 the results of a one-way ANOVA are reported. They indicated no significant difference for type of school and relationship with the administrative team/cabinet  $F(2, 190) = .104, p > .05$ . These results indicated that job satisfaction in this category was unaffected by type of school.

Table 91

*Analysis of Variance for the Relationship with the Administrative Team/Cabinet by Type of School*

Type of school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Elementary	88	1.85	1.150		
Middle/Junior High	49	1.77	1.065		
High	56	1.78	1.003		
Total	193	1.81	1.083	.104	.901

Factor 9. Relationship with the board of education.

The highest scores were noted for males ( $M = 1.87$ ,  $SD = .983$ ), for principals with 21-25 years of experience in the principalship ( $M = 1.75$ ,  $SD = .930$ ), for principals serving in their present school 6-10 years ( $M = 1.74$ ),  $SD = .943$ ), and for middle/junior high school principals ( $M = 1.75$ ,  $SD = .902$ ). All of these highest scores fell within the *very satisfied* range on the questionnaire scale (1.00-1.99).

The lowest scores were observed for females ( $M = 2.21$ ,  $SD = 1.25$ ), for principals with 26-30 years experience in the principalship ( $M = 2.70$ ,  $SD = 1.337$ ), for principals serving in their present schools 1-5 years ( $M = 2.08$ ,  $SD = 1.121$ ), and for elementary school principals ( $M = 2.12$ ,  $SD = 1.220$ ). All of these lowest scores fell within the *moderately satisfied* range on Iowa questionnaire scale (2.00-2.99).

The independent  $t$ -test indicated no significant difference  $t(191) = -1.901$ ,  $p > .060$ , between males ( $M = 1.87$ ) and females ( $M = 2.21$ ). These results indicated that sex did not affect a principal's job satisfaction with the relationship to the board of education.

The results of a one-way ANOVA in Table 92 indicated no significant differences for the relationship with the board of education and number of years served as a principal  $F(2, 190) = 1.374$ ,  $p > .05$ . This indicated the variable did not affect job satisfaction with relationship to the board of education.

Table 92

*Analysis of Variance for the Relationship with the Board of Education by Years Served as a Principal*

Years served as a principal	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	51	1.96	1.112		
6-10	48	1.79	1.030		
11-15	37	2.10	1.125		
16-20	24	2.00	1.063		
21-25	16	1.75	.930		
26-30	10	2.70	1.337		
31+	7	2.42	1.133		
Total	193	1.98	1.094	1.374	.227

Table 93 results of a one-way ANOVA showed no significant differences for the relationship with the board of education and the number of years served in the present school  $F(2, 190) = 1.772$ ,  $p > .05$ . The data show no effect from this variable on job satisfaction with relationship to the board of education.

Table 93

*Analysis of Variance for the Relationship with the Board of Education by Years Served in Present School*

Years served in present school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	99	2.08	1.121		
6-10	50	1.74	.943		
11 +	44	2.06	1.169		
Total	193	1.98	1.094	1.772	.173

Table 94

*Analysis of Variance for the Relationship with the Board of Education by Type of School*

Type of school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Elementary	88	2.12	1.220		
Middle/Junior High	49	1.75	.902		
High	56	1.98	1.017		
Total	193	1.95	1.094	1.815	.166

The results of a one-way ANOVA are presented in Table 94. The data indicated no significant difference for type of school and relationship with the board of education  $F(2, 190) = 1.815$ ,  $p > .05$ , indicating no affect on principals' job satisfaction with relationship to the board of education.

Factor 10. Relationship with the parents of your school.

The highest satisfaction scores were observed for males ( $M = 1.76$ ,  $SD = .648$ ), for principals with 21-25 years experience in the principalship ( $M = 1.50$ ,  $SD = .516$ ), for principals serving in their present school 11 or more years ( $M = 1.54$ ,  $SD = .547$ ), and for elementary school principals ( $M = 1.63$ ,  $SD = .760$ ). All of these highest scores fell within the *very satisfied* range on the questionnaire scale (1.00-1.99).

The lowest satisfaction scores were observed for females ( $M = 1.62$ ,  $SD = .718$ ), for principals with 26 - 30 years in the principalship ( $M = 2.00$ ,  $SD = .471$ ), for principals serving 31 or more years ( $M = 2.00$ ,  $SD = 1.414$ ), for principals serving in their present school 1-5 years ( $M = 1.80$ ,  $SD = .737$ ), and for high school principals ( $M = 1.89$ ,  $SD = .593$ ). Two of these lowest scores fell within the *very satisfied* scale on the questionnaire

scale (1.00-1.99) and two scores fell within the *moderately satisfied* on Iowa questionnaire scale (.2.00-2.99).

The independent *t*-test indicated no significant difference  $t(191) = 1.397, p > .164$ , for job satisfaction with the relationship with the parents between males ( $M = 1.76$ ) and females ( $M = 1.62$ ). These results indicated the sex of the principals did not affect their job satisfaction regarding relationships with the parents of their schools.

The results of a one-way ANOVA as reported in Table 95 indicated no significant differences between the relationship with the parents and the number of years served as a principal  $F(6, 186) = 1.435, p > .05$ . These results indicated that job satisfaction regarding this factor was not impacted by years served as a principal.

Table 95

*Analysis of Variance for the Relationship with the Parents of Your School by Years*

*Served as a Principal*

Years served as a principal	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	51	1.78	.672		
6-10	48	1.68	.624		
11-15	37	1.54	.605		
16-20	24	1.83	.701		
21-25	16	1.50	.516		
26-30	10	2.00	.471		
31 +	7	2.00	1.414		
Total	193	1.71	.674	1.435	.203

Table 96

*Analysis of Variance for the Relationship with Parents of Your School by Years Served in Present School*

Years served in present school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	99	1.80	.737		
6-10	50	1.68	.620		
11 +	44	1.54	.547		
Total	193	1.7150	.674	2.437	.090

The results of a one-way ANOVA presented in Table 96 indicated no significant difference for number of years served in the present school and relationship with the parents  $F(2, 190) = 2.437, p > .05$ . These data showed this variable did not influence job satisfaction regarding relationship with the parents of the principals' schools.

Table 97

*Analysis of Variance for the Relationship with the Parents of Your School by Type of School*

Type of school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Elementary	88	1.63	.760		
Middle/Junior High	49	1.65	.560		
High	56	1.89	.593		
Total	193	1.71	.674	2.804	.063

Table 97 indicated no significant differences for type of school and relationship with the parents of their schools  $F(2, 190) = 2.804, p > .05$ . Job satisfaction with the relationship with the parents of principals' schools was not impacted by type of school.

Factor 11. Relationship with the teachers of your school.

The highest scores were observed for female principals ( $M = 1.56$ ,  $SD = .786$ ), for principals with 26-30 years of experience in the principalship ( $M = 1.30$ ,  $SD = .483$ ), for principals serving in their present school 11 or more years ( $M = 1.31$ ,  $SD = .471$ ), and for principals of middle/junior high schools ( $M = 1.48$ ,  $SD = .767$ ). All of these highest scores fell within *very satisfied* range on the questionnaire scale (1.00 - 1.99).

The lowest scores were observed for male principals ( $M = 1.58$ ,  $SD = .683$ ), for principals with 31 or more years experience in the principalship ( $M = 1.71$ ,  $SD = 1.112$ ), for principals serving in their present schools 1 - 5 years ( $M = 1.69$ ,  $SD = .826$ ), and for high school principals ( $M = 1.71$ ,  $SD = .824$ ). All of these lowest scores fell within the *very satisfied* range on the questionnaire scale (1.00 – 1.99).

The independent  $t$ -test indicated no significant difference  $t(191) = .202$ ,  $p > .840$ , between males ( $M = 1.58$ ) and females ( $M = 1.56$ ). These results indicated that job satisfaction with relationship with teachers of the principal's school is not impacted by the sex of the principal.

The results of a one-way ANOVA in Table 98 indicated no significant differences between the relationship with the teachers of their schools and years served as a principal  $F(6, 186) = 8.66$ ,  $p > .05$ . In other words, job satisfaction with relationship with the teachers of a principal's school was unaffected by number of years served as a principal.

Table 98

*Analysis of Variance for the Relationship with the Teachers of Your School by Years**Served as a Principal*

Years served as a principal	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	51	1.68	.706		
6-10	48	1.60	.609		
11-15	37	1.56	.800		
16-20	24	1.54	.883		
21-25	16	1.31	.478		
26-30	10	1.30	.483		
31 +	7	1.71	1.112		
Total	193	1.57	.718	.866	.521

Table 99 displays the results of one-way ANOVA, indicating a statistically significant difference between the number of years principals served in their present schools and the relationship with the teachers of their school  $F(2, 190) = 4.397$ ,  $p < .05$ . A Scheffé post hoc test indicated a statistically significant difference between the mean scores of principals who served in their present schools 1-5 years and principals who served in their present school more than 11 years ( $p = .014$ ), with a moderate effect size  $d = .59$ . Principals who served in their present school 11 or more years appeared to have been more satisfied with job satisfaction with the relationship to their teachers than principals who served in present schools 1-5 years.



Table 99

*Analysis of Variance for the Relationship with the Teachers of Your School by Years**Served in Present School*

Years served in present school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	99	1.69	.826		
6-10	50	1.56	.611		
11 +	44	1.31	.471		
Total	193	1.57	.718	4.397	.014*

\* The mean is significant at the .05 level (2-tailed).

The results of a one-way ANOVA are presented in Table 100. They indicated no significant difference between type of school and relationship with the teachers  $F(2, 190) = 1.548$ ,  $p > .05$ . These results indicated that type of school did not affect job satisfaction with relationship with the teachers of principals' school.

Table 100

*Analysis of Variance for the Relationship with the Teachers of Your School by Type of**School*

Type of school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Elementary	88	1.53	.605		
Middle/Junior High	49	1.48	.767		
High	56	1.71	.824		
Total	193	1.57	.718	1.548	.215

Factor 12. Consistency of the board in making decisions in the best interest of children.

The highest satisfaction scores were observed for male principals ( $M = 2.03$ ,  $SD = 1.030$ ), for principals with 1-5 years experience in the principalship ( $M = 1.98$ ,  $SD = 1.140$ ), for principals serving in their present school 6-10 years ( $M = 1.80$ ,  $SD = .947$ , and for middle/junior high school principals ( $M = 1.95$ ,  $SD = 1.019$ ). Three of these highest scores fell within the *very satisfied* range on the questionnaire scale (1.00-1.99). One score fell within the *moderately satisfied* range (2.00-2.99) on the Iowa questionnaire scale.

The lowest satisfaction scores were observed for female principals ( $M = 2.16$ ,  $SD = 1.295$ ), for principals with 31 or more years ( $M = 2.71$ ,  $SD = .951$ ), for principals serving in their present school 11 or more years ( $M = 2.18$ ,  $SD = 1.105$ ), and for elementary school principals ( $M = 2.14$ ,  $SD = 1.208$ ). All of these lowest scores fell within the *moderately satisfied* range on the questionnaire scale (2.00-2.99).

The independent  $t$ -test indicated no significant difference  $t(191) = -.735$ ,  $464$ , for job satisfaction and the consistency of the board in making decisions in the best interest of children between males ( $M = 2.03$ ) and females ( $M = 2.16$ ). These results indicated that job satisfaction with the consistency of the board in making decisions in the best interest of children was not impacted by the sex of the principals.

The results of a one-way ANOVA are presented in Table 101. They indicated no significant difference for years served as a principal and the board making decisions in the best interest of students  $F(6, 186) = .528$ ,  $p > .05$ . These results showed that the job

satisfaction with this factor was not impacted by the number of years served as a principal.

Table 101

*Analysis of Variance for the Consistency of the Board in Making Decisions in the Best Interest of Children by Years Served as a Principal*

Years served as a principal	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	51	1.98	1.140		
6-10	48	2.02	1.175		
11-15	37	2.16	1.166		
16-20	24	2.16	1.129		
21-25	16	2.00	1.032		
26-30	10	2.00	1.054		
31 +	7	2.71	.951		
Total	193	2.07	1.126	.528	.786

In Table 102 the results of a one-way ANOVA indicated no significant difference for years served in the present school and the consistency of the board in making decisions in the best interest of children ( $F(2, 190) = 2.073$ ,  $p > .05$ ). This indicated no impact from this variable on job satisfaction with the consistency of the board making decisions in the best interest of children.

The results of a one-way ANOVA presented in Table 103 indicate no significant difference for type of school and job satisfaction with the consistency of the board in making decisions in the best interest of children ( $F(2, 190) = .439$ ,  $p > .05$ ) showing that type of school did not impact this variable.

Table 102

*Analysis of Variance for the Consistency of the Board in Making Decisions in the Best Interest of Children by Years Served in Present School*

Years served in present school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	99	2.17	1.204		
6-10	50	1.80	.947		
11 +	44	2.18	1.105		
Total	193	2.07	1.126	2.073	.129

Table 103

*Analysis of Variance for the Consistency of the Board in Making Decisions in the Best Interest of Children by Type of School*

Type of school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Elementary	88	2.14	1.208		
Middle/Junior High	49	1.95	1.019		
High	56	2.07	1.093		
Total	193	2.07	1.126	.439	.645

Factor 13. How well the board of education acknowledges your accomplishments.

The highest satisfaction scores were observed for male principals ( $M = 2.41$ ,  $SD = 1.217$ ), for principals with 6-10 years of experience in the principalship ( $M = 2.20$ ,  $SD = 1.236$ ), for principals serving in their present school 6-10 years ( $M = 2.30$ ,  $SD = 1.182$ ), and for middle/junior high school principals ( $M = 2.28$ ,  $SD = 1.118$ ). All of these highest scores fell within the *moderately satisfied* range on the questionnaire scale (2.00-2.99).

The lowest satisfaction scores were observed for female principals ( $M = 2.71$ ,  $SD = 1.367$ ), for principals with 31 or more years of experience ( $M = 3.00$ ,  $SD = 1.732$ ), for principals serving in their present school 1-5 years ( $M = 2.59$ ,  $SD = 1.285$ ), for principals who had served in their present school 11 or more years ( $M = 2.59$ ,  $SD = 1.352$ ), and for elementary school principals ( $M = 2.73$ ,  $SD = 1.360$ ). Three of these lowest scores fell within the *moderately satisfied* range (2.00-2.99) with one score falling within the *neutral* range on the questionnaire scale (3.00-3.99).

The independent  $t$ -test indicated no significant differences  $t(191) = -1.529$ ,  $p > .128$ ., for job satisfaction with how well the board of education acknowledged the principals' accomplishments between males ( $M = 2.41$ ) and females ( $M = 2.71$ ). These results indicated that job satisfaction with this factor was unaffected by the sex of the principals.

Table 104

*Analysis of Variance for How Well the Board of Education Acknowledges Principal's Accomplishments by Years Served as a Principal*

Years served as a principal	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	51	2.41	1.235		
6-10	48	2.20	1.236		
11-15	37	2.64	1.252		
16-20	24	2.58	1.316		
21-25	16	2.93	1.289		
26-30	10	2.90	1.197		
31 +	7	3.00	1.732		
Total	193	2.51	1.275	1.219	.298

The results of a one-way ANOVA presented in Table 104 indicated no significant differences for number of years served as a principal and how well the board of education acknowledged principals' accomplishments ( $F(6, 186) = 1.219, p > .05$ ). These data indicated that job satisfaction regarding this factor was unaffected by the number of years served as a principal.

The results of a one-way ANOVA presented in Table 105 indicate no significant difference between number of years served in the present school and how well the board of education acknowledged a principal's accomplishments  $F(2, 190) = .988, p > .05$ . This data showed that the job satisfaction regarding this factor was unaffected by the number of years the principal had served in present school.

Table 105

*Analysis of Variance for How Well the Board of Education Acknowledges Principal's Accomplishments by Years Served in Present School*

Years in present school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	99	2.59	1.285		
6-10	50	2.30	1.182		
11 +	44	2.59	1.352		
Total	193	2.51	1.275	.988	.374

Table 106 presents the results of a one-way ANOVA. The analysis of variance indicated no significant difference for type of school and how well the board of education acknowledged a principal's accomplishments  $F(2, 190) = 2.522, p > .05$ . These results

indicated that type of school did not affect job satisfaction with how well the board of education acknowledged a principal's accomplishments.

Table 106

*Analysis of Variance for How Well the Board of Education Acknowledges Principal's Accomplishments by Type of School*

Type of school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Elementary	88	2.73	1.360		
Middle/Junior High	49	2.28	1.118		
High	56	2.37	1.229		
Total	193	2.51	1.275	2.522	.083

Factor 14. Your annual salary.

The highest satisfaction scores were observed for male principals ( $M = 2.56$ ,  $SD = 1.043$ ), for principals with 21-25 years of experience in the principalship ( $M = 2.43$ ,  $SD = 1.152$ ), for principals serving in their present schools 6-10 years ( $M = 2.44$ ,  $SD = .993$ ), and for middle/junior high school principals ( $M = 2.28$ ,  $SD = .889$ ). All of these highest satisfaction scores fell within the *moderately satisfied* range on the questionnaire scale (2.00-2.99).

The lowest satisfaction scores were seen for female principals ( $M = 2.77$ ,  $SD = 1.187$ ), for principals with 26-30 years in the principalship ( $M = 2.80$ ,  $SD = 1.229$ ), for principals serving in their present school 1-5 years ( $M = 2.76$ ,  $SD = 1.095$ ), and for elementary school principals ( $M = 2.78$ ,  $SD = 1.788$ ). All of these lowest satisfaction scores fell within the *moderately satisfied* range on the questionnaire scale (2.00-2.99).

The independent  $t$ -test showed no significant difference  $t(191) = -1.239, p > .217$ ) between males ( $M = 2.56$ ) and females ( $M = 2.77$ ) indicating that job satisfaction with annual salary was unaffected by the sex of the principals.

The results of a one-way ANOVA presented in Table 107 indicate no significant differences for number of years served as a principal and the principal's annual salary  $F(6, 186) = .284, p > .05$ . These results showed that the principals' job satisfaction with annual salary was unaffected by the number of years served.

Table 107

*Analysis of Variance for the Annual Salary by Years Served as a Principal*

Years served as a principal	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	51	2.74	1.036		
6-10	48	2.54	1.090		
11-15	37	2.62	.981		
16-20	24	2.70	1.301		
21-25	16	2.43	1.152		
26-30	10	2.80	1.229		
31 +	7	2.57	1.397		
Total	193	2.63	1.095	.284	.944

The results of a one-way ANOVA presented in Table 108 indicated no significant difference for years served in the present school and principals' annual salary  $F(2, 190) = 1.608, p > .05$ . These results indicated that principals' job satisfaction with annual salary was unaffected by this variable.



Table 108

*Analysis of Variance for the Annual Salary by Years Served in Present School*

Years served in present school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	99	2.76	1.095		
6-10	50	2.44	.993		
11 +	44	2.56	1.189		
Total	193	2.63	1.095	1.608	.203

The results of a one-way ANOVA shown in Table 109 indicated a statistically significant difference for type of school and annual salary of principals  $F(2, 190) = 3.540$ ,  $p < .05$ . A Scheffé post hoc test indicated a significant difference between elementary and middle/junior high school principals ( $p = .038$ ), with a moderate effect size  $d = .45$ . Middle/junior high school principals ( $M = 2.28$ ) were more satisfied with their annual salaries than elementary school principals ( $M = 2.78$ ).

Table 109

*Analysis of Variance for the Annual Salary by Type of School*

Type of school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Elementary	88	2.78	1.188		
Middle/Junior High	49	2.28	.889		
High	56	2.71	1.056		
Total	193	2.63	1.095	3.540	.031*

\* The mean is significant at the 05 level (2-tailed).

Factor 15. Community's image of school administrators.

The highest scores were observed for male principals ( $M = 2.36$ ,  $SD = .973$ ), for principals with 21-25 years of experience in the principalship ( $M = 2.12$ ,  $SD = .500$ ), for principals serving in their present school 11 or more years ( $M = 2.38$ ,  $SD = 1.104$ ), and for middle/junior high school principals ( $M = 2.18$ ,  $SD = .833$ ). All of these highest scores were within the *moderately satisfied* range on the questionnaire scale (2.00-2.99).

The lowest scores were observed for female principals ( $M = 2.71$ ,  $SD = 1.133$ ), for principals with 31 or more years in the principalship ( $M = 2.71$ ,  $SD = .1.603$ ), for principals serving in their present schools 1-5 years ( $M = 2.51$ ,  $SD = 1.023$ ), and for elementary school principals ( $M = 2.71$ ,  $SD = 1.103$ ). These lowest scores fell within the *moderately satisfied* range on the questionnaire scale (2.00-2.99).

The independent  $t$ -test did indicated a statistically significant difference  $t(2, 191) = -2.132$ ,  $p < .035$  between males ( $M = 2.36$ ,  $SD = .973$ ) and females ( $M = 2.71$ ,  $SD = 1.133$ ). That is male principals were significantly more satisfied with the community's image of school administrators than female principals.

Table 110 presents the results of a one-way ANOVA that indicated no significant differences between number of years served as a principal and the community's image of school administrators  $F(6, 186) = .487$ ,  $p > .05$ . These results indicated that job satisfaction with the community's image of school administrators was not impacted by number of years served as a principal.

Table 110

*Analysis of Variance for the Community's Image of School Administrators by Years**Served as a Principal*

Years served as a principal	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	51	2.52	.986		
6-10	48	2.47	1.091		
11-15	37	2.56	1.093		
16-20	24	2.37	1.095		
21-25	16	2.12	.500		
26-30	10	2.60	1.074		
31 +	7	2.71	1.603		
Total	193	2.48	1.041	.487	.818

The results of a one-way ANOVA are presented in Table 111 and indicate no significant difference between the community's image of school administrator and the numbers of years served in the present school  $F(2, 190) = .241$ ,  $p > .05$ . These results showed the number of years served in their present school did not impact the principals' job satisfaction with the community's image of school administrators.

Table 111

*Analysis of Variance for the Community's Image of School Administrators by Years**Served in Present School*

Years served in present school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	99	2.51	1.023		
6-10	50	2.50	1.035		
11 +	44	2.38	1.104		
Total	193	2.48	1.041	.241	.786

The results of a one-way ANOVA presented in Table 112 indicated a statistically significant difference for type of school and the community's image of school administrators  $F(2, 190) = 4.701, p < .05$ . A Scheffé post hoc test demonstrated a statistically significant difference between means of elementary and middle/junior high school principals ( $p = .015$ ), with a moderate effect size  $d = .55$ . Middle/junior high school principals ( $M = 2.18$ ) were more satisfied with the community's image of school administrators than elementary principals ( $M = 2.71$ ).

Table 112

*Analysis of Variance for the Community's Image of School Administrators by Type of School*

Type of school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Elementary	88	2.71	1.103		
Middle/Junior High	49	2.18	.833		
High	56	2.37	1.036		
Total	193	2.48	1.041	4.701	.010*

\* The mean is significant at the .05 level (2-tailed).

#### Factor16. Time spent on management tasks.

The highest satisfaction scores were observed for female principals ( $M = 3.01, SD = 1.059$ ), for principals with 6-10 years of experience in the principalship ( $M = 2.97, SD = 1.101$ ), for principals serving in their present schools 6-10 years ( $M = 2.88, SD = 1.102$ ), and for middle/junior high school principals ( $M = 2.89, SD = 1.005$ ). Three of these highest satisfaction scores fell within the *neutral* range on the questionnaire scale (3.00-3.99), with one score falling within the *moderately satisfied* (2.00-2.99).

The lowest satisfaction scores were observed for male principals ( $M = 3.07$ ,  $SD = .985$ ), for principals with 16-20 years in the principalship ( $M = 3.20$ ,  $SD = .977$ ), for principals serving 1-5 years in their present school ( $M = 3.15$ ,  $SD = 1.033$ ), and for high school principals ( $M = 3.14$ ,  $SD = .980$ ). All of these lowest satisfaction scores fell within the *neutral* range on the questionnaire scale (3.00-3.99).

The independent  $t$ -test indicated no significant differences  $t(191) = .363$ ,  $p > .05$ , between males ( $M = 3.07$ ) and females ( $M = 3.01$ ). These results showed that job satisfaction with time spent on management tasks was not impacted by the sex of the principals.

Table 113

*Analysis of Variance for the Time Spent on Management Tasks by Years Served as a Principal*

Years served as a principal	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	51	3.05	1.027		
6-10	48	2.97	1.101		
11-15	37	3.02	.957		
16-20	24	3.20	.977		
21-25	16	3.06	1.062		
26-30	10	3.10	.994		
31 +	7	3.00	.816		
Total	193	3.05	1.009	.145	.990

Table 113 presents the results of one-way ANOVA indicating no significant difference  $F(6, 186) = .145$ ,  $p > .05$  for number of years served as a principal and time

spent on management tasks. These data showed that job satisfaction with this factor was not impacted by the number of years served as a principal.

One-way ANOVA results (Table 114) indicated no significant differences  $F(2, 190) = 1.229$ ,  $p > .05$ , for number of years served in the present school and time spent on management tasks. These results indicated that job satisfaction with the time spent on management tasks was not impacted by the number of years principals served in their present school.

Table 114

*The Analysis of Variance for the Time Spent on Management Tasks by Years Served in Present School*

Years served in present school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	99	3.15	1.033		
6-10	50	2.88	1.002		
11 +	44	3.02	.952		
Total	193	3.05	1.009	1.229	.295

Table 115

*The Analysis of Variance for the Time Spent on Management Tasks by Type of School*

Type of school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Elementary	88	3.07	1.030		
Middle/Junior High	49	2.89	1.005		
High	56	3.14	.980		
Total	193	3.05	1.009	.829	.438

The one-way ANOVA results presented in Table 115 indicate no significant difference for type of school and the time principals spent on management tasks  $F(2, 190) = .829, p > .05$ . These results showed type of school did not impact satisfaction with time spent on management tasks.

Factor 17. Time spent on leadership activities.

The highest satisfaction scores were observed for female principals ( $M = 2.93, SD = 1.121$ ), for principals with 6-10 years of experience in the principalship ( $M = 2.66, SD = .974$ ), for principals serving 6-10 years in their present schools ( $M = 2.72, SD = .881$ ), and for middle/junior high school principals ( $M = 2.79, SD = .999$ ). All of these highest scores fell within the *moderately satisfied* range on the questionnaire scale (2.00 – 2.99).

The lowest satisfaction scores were observed for male principals ( $M = 3.11, SD = 1.012$ ), for principals with 1-5 years in the principalship ( $M = 3.33, SD = 1.070$ ), for principals serving 1-5 years in their present schools ( $M = 3.23, SD = 1.141$ ), and for high school principals ( $M = 3.32, SD = 1.028$ ). These lowest scores fell within the *neutral* range on the questionnaire scale (3.00-3.99) indicating that principals were neither satisfied, nor dissatisfied with time spent on leadership activities.

The independent  $t$ -test indicated no significant difference  $t(191) = 1.085, p > 2.80$ ), between males ( $M = 3.11, SD = 1.012$ ) and females ( $M = 2.93, SD = 1.121$ ) for this factor. These results indicated that job satisfaction with leadership activities was unaffected by the sex of the principals.

In Table 116 results of a one-way ANOVA indicated no significant difference for years served as a principal and time spent on leadership activities  $F(6, 186) = 1.899, p >$

.05. These data indicated that job satisfaction with time spent on leadership activities were unaffected by number of years served as a principal.

Table 116

*Analysis of Variance for the Time Spent on Leadership Activities by Years Served as a Principal*

Years served as a principal	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	51	3.33	1.070		
6-10	48	2.66	.974		
11-15	37	3.13	1.084		
16-20	24	3.16	1.129		
21-25	16	3.00	.966		
26-30	10	3.20	1.032		
31 +	7	2.85	.690		
Total	193	3.05	1.051	1.899	.083

Table 117

*Analysis of Variance for the Time Spent on Leadership Activities by Years Served in Present School*

Years served in present school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	99	3.23	1.141		
6-10	50	2.72	.881		
11 +	44	3.04	.938		
Total	193	3.05	1.051	4.071	.019*

\* The mean is significant at the .05 level (2-tailed).

The results of a one-way ANOVA shown in Table 117 indicated a statistically significant difference for the number of years principals served in their present schools



and time spent on leadership activities  $F(2, 190) = 4.071$ ,  $p < .05$ . A Scheffé post hoc test indicated a statistically significant difference between the mean for principals who served 1-5 years and 6-10 years ( $p = .019$ ), with a moderate effect size  $d = .50$ . Principals who had served in their present schools 6-10 years ( $M = 2.72$ ) were more satisfied with job satisfaction with time spent on leadership activities than principals serving 1-5 years ( $M = 3.23$ ).

Table 118

*Analysis of Variance for the Time Spent on Leadership Activities by Type of School*

Type of school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Elementary	88	3.03	1.066		
Middle/Junior High	49	2.79	.999		
High	56	3.32	1.028		
Total	193	3.05	1.051	3.383	.036*

\* The mean is significant at the .05 level (2-tailed).

The results of a one-way ANOVA as presented in Table 118 indicated a statistically significant difference for type of school and time spent on leadership activities  $F(2, 190) = 3.383$ ,  $p = .05$ . A Scheffé post hoc test indicated a statistically significant difference between the means of middle/junior high school principals and high school principals ( $p = .037$ ), with a large effect size  $d = .83$ . Principals of middle/junior high school principals ( $M = 2.72$ ) were more satisfied with job satisfaction with leadership activities than high school principals ( $M = 3.32$ ).

Factor 18. The quality of your relationship with the superintendent.

The highest satisfaction scores were observed for female principals ( $M = 1.77$ ,  $SD = 1.034$ ), for principals with 6-10 years of experience in the principalship ( $M = 1.60$ ,  $SD = .791$ ), for principals serving 1-5 years in their present school ( $M = 1.74$ ,  $SD = 1.091$ ), and for principals of high schools ( $M = 1.71$ ,  $SD = .928$ ). All of these highest satisfaction scores fell within the *very satisfied* range on the questionnaire scale (1.00-1.99).

The lowest satisfaction scores were observed for male principals ( $M = 1.78$ ),  $SD = 1.068$ ), for principals with 31 or more years of experience in the principalship ( $M = 2.42$ ,  $SD = 1.618$ ), for principals serving in their present schools 6-10 years ( $M = 1.84$ ,  $SD = .976$ ), and for principals of elementary schools ( $M = 1.84$ ,  $SD = 1.113$ ). Three of these lowest satisfaction scores fell within the *very satisfied* range on the questionnaire scale (1.00-1.99) with one score falling within the *moderately satisfied* range on the questionnaire scale (2.00-2.99).

The independent  $t$ - test indicated no significant difference  $t(191) = .651$ ,  $p > .966$ , for males ( $M = 1.78$ ) and females ( $M = 1.77$ ). These results indicated that the sex of the principal did not affect job satisfaction with the quality of the principals' relationship with the superintendent.

In Table 119 the results of a one-way ANOVA indicated no significant differences between years served as a principal and the quality of principals' relationship with the superintendent  $F(6, 186) = .823$ ,  $p > .05$ . These data indicated this variable did not impact job satisfaction with the quality of principals' relationship with the superintendent.

Table 119

*The Analysis of Variance for the Quality of Principal's Relationship with the Superintendent by Years Served as a Principal*

Years served as a principal	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	51	1.80	1.113		
6-10	48	1.60	.791		
11-15	37	1.75	.954		
16-20	24	1.70	1.122		
21-25	16	2.00	1.316		
26-30	10	1.90	1.197		
31 +	7	2.42	1.618		
Total	193	1.77	1.054	.823	.554

Table 120

*The Analysis of Variance for the Quality of Principal's Relationship with the Superintendent by Years Served in Present School*

Years in present school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	99	1.74	1.091		
6-10	50	1.84	.976		
11 +	44	1.77	1.075		
Total	193	1.77	1.054	.127	.881

In Table 120 the results of a one-way ANOVA indicated no significant difference for the number of years principals served in their present schools and the quality of their relationship with the superintendent  $F(2, 190) = .127, p > .05$ . These results indicated that job satisfaction with the relationship with the superintendent was unaffected by years served in their present school.

Table 121

*The Analysis of Variance for the Quality of Principal's Relationship with the Superintendent by Type of School*

Type of school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Elementary	88	1.84	1.113		
Middle/Junior High	49	1.73	1.094		
High	56	1.71	.928		
Total	193	1.77	1.054	.298	.743

The results of a one-way ANOVA shown in Table 121 indicated no significant difference for type of school and the quality of the principal's relationship with the superintendent  $F(2, 190) = .298$ ,  $p > .05$ . These data indicated that job satisfaction with the quality of principals' relationship with the superintendents was unaffected by type of school.

Factor 19. Process the superintendent uses to evaluate you.

The highest satisfaction scores were observed for female principals ( $M = 2.18$ ,  $SD = 1.080$ ), for principals with 1-5 years of experience in the principalship ( $M = 2.11$ ,  $SD = .972$ ), for principals serving in their present school 6-10 years ( $M = 2.08$ ,  $SD = 1.046$ ), and for elementary school principals ( $M = 2.11$ ,  $SD = 1.055$ ). All of these highest satisfaction scores fell within the *moderately satisfied* range on the questionnaire scale (2.00-2.99).

The lowest satisfaction scores were observed for male principals ( $M = 2.20$ ,  $SD = 1.064$ ), for principals with 31 or more years in the principalship ( $M = 2.71$ ,  $SD = 1.380$ ),

for principals serving in present schools 1-5 years ( $M = 2.25$ ,  $SD = 1.023$ ), and for high school principals ( $M = 2.37$ ,  $SD = 1.184$ ). All of these lowest satisfaction scores fell within the *moderately satisfied* range the questionnaire scale (2.00-2.99).

The independent  $t$ -test indicated no significant difference between males ( $M = 2.20$ ) and females ( $M = 2.18$ ). These data indicated that job satisfaction with the process the superintendent uses to evaluate principals was not influenced by the sex of the principals.

Table 122

*The Analysis of Variance for the Process the Superintendent Uses to Evaluate Principals by Years Served as a Principal*

Years served as a principal	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	51	2.11	.972		
6-10	48	2.16	1.017		
11-15	37	2.24	1.211		
16-20	24	2.12	.991		
21-25	16	2.18	1.046		
26-30	10	2.40	1.349		
31 +	7	2.71	1.380		
Total	193	2.19	1.066	.410	.872

The results of a one-way ANOVA in Table 122 indicated no significant difference for number of years served as a principal and the process the superintendent uses to evaluate the principal  $F(6, 186) = .410$ ,  $p > .05$ . These results indicated the number of years as a principal did not influence job satisfaction with the process the superintendent uses to evaluate principals.

Table 123

*The Analysis of Variance for the Process the Superintendent Uses to Evaluate Principals by Years Served in Present School*

Years served in present school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
1-5	99	2.25	1.023		
6-10	50	2.08	1.046		
11 +	44	2.20	1.192		
Total	193	2.19	1.066	.433	.649

The results of a one-way ANOVA presented in Table 123 showed no significant difference for number of years served in the present school and the process the superintendent uses to evaluate principals  $F(2, 190) = .433$ ,  $p > .05$ . These results indicated that job satisfaction with the process the superintendent uses to evaluate principals was not influenced by the number of years principals served in their present schools.

Table 124 presents the results of a one-way ANOVA indicating no significant difference for the process the superintendent uses to evaluate principals and the type of school  $F(2, 190) = 1.113$ ,  $p > .05$ . Thus, job satisfaction with the process the superintendent uses to evaluate principals was not influenced by type of school.

Table 124

*The Analysis of Variance for the Process the Superintendent Uses to Evaluate Principals by Type of School*

Type of school	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Elementary	88	2.11	1.055		
Middle/Junior High	49	2.14	.935		
High	56	2.37	1.184		
Total	193	2.19	1.066	1.113	.331

### Research Question 2

Is there a significant difference in Iowa principals' job satisfaction in 2005 when contrasted with job satisfaction in 1999?

The independent *t*-test indicated a statistically significant difference for overall job satisfaction for all of respondents in the 1999 and the 2005 study  $t(1082) = 2.239, p < .025$ , with means of 2.04 versus 1.90.

Sub-Question a: Is there a significant difference in Iowa principals' job satisfaction in 2005 when contrasted with job satisfaction in 1999 in overall job satisfaction according to sex, years served as a principal, years in their present school, and type of school?

The independent *t*-test between the 1999 study and the 2005 study indicated these statistically significant differences with means for the following variables.

### Sex of principals with overall job satisfaction

Males	$t(763) = 2.290, p < .022$ $M\ 1999 = 2.08$ $M\ 2005 = 1.91$
Females and males	$t(1080) = 2.423, p < .016$ $M\ 1999 = 2.06$ $M\ 2005 = 1.93$

### Years served as a principal with overall job satisfaction

1-5 years category	$t(327) = 2.078, p < .038$ $M\ 1999 = 2.04,$ $M\ 2005 = 1.80$
11-15 years category	$t(203) = 2.185, p < .030$ $M\ 1999 = 2.18,$ $M\ 2005 = 1.86$

### Years served in their present school with overall job satisfaction

There was no statistically significant differences for this category.

### Type of school category with overall job satisfaction

Middle/Junior High	$t(205) = 2.043, p < .042$ $M\ 1999 = 2.11,$ $M\ 2005 = 1.86$
--------------------	---

Sub-Question b: Is there a significant difference in Iowa principals' job satisfaction in 2005 when contrasted with job satisfaction in 1999 for each of the 20 factors rated by Iowa public school principals?

The independent *t*-test indicated a statistically significant difference with means for the following factors.

1. Time available that put balance in the principal's life.	$t(1081) = 2.157, p < .031$ $M\ 1999 = 3.68,$ $M\ 2005 = 3.50$
---	--



2. The consistency of the board in making decisions in the best interest of students.	$t(1083) = 2.530, p < .012$ $M 1999 = 2.31$ $M 2005 = 2.08$
3. How well the board of education acknowledges your accomplishments.	$t(1082) = 2.107, p < .035$ $M 1999 = 2.72$ $M 2005 = 2.52$
4 .Your annual salary.	$t(1082) = 3.626, p < .001$ $M 1999 = 2.97$ $M 2005 = 2.64$
5. The community's image of school administrators.	$t(1082) = 2.034, p < .042$ $M 1999 = 2.65$ $M 2005 = 2.48$
6. The process the superintendent uses to evaluate principals.	$t(1070) = 2.832, p < .005$ $M 1999 = 2.46$ $M 2005 = 2.20$
7. All things considered, indicate your overall level of job satisfaction.	$t(1082) = 2.239, p < .025$ $M 1999 = 2.04$ $M 2005 = 1.90$

Sub-Question c: Is there a significant difference in Iowa principals' job

satisfaction in 2005 when contrasted with job satisfaction in 1999 in the satisfaction level for each of the 20 factors according to sex, years served as a principal, years served in their present school, and type of school?

The independent *t*-test indicated significant differences with means for the 1999 and 2005 study between males and females in these job satisfaction factors:

Females:

1.The process the superintendent uses to evaluate principals.	$t(313) = 2.425, p < .016$ $M 1999 = 2.58$ $M 2005 = 2.18$
---	--

## Males:

- |   |  |
|---|--|
| 1. Relations with the board of education.   | $t(759) = 2.305, p < .021$<br>$M\ 1999 = 2.12$<br>$M\ 205 = 1.87$  |
| 2. The consistency of the board in making decisions in the best interest of the children. | $t(761) = 2.636, p < .014$<br>$M\ 1999 = 2.30$<br>$M\ 2005 = 2.03$ |
| 3. How well the board of education acknowledges your accomplishments.                     | $t(761) = 2.905, p < .004$<br>$M\ 1999 = 2.76$<br>$M\ 2005 = 2.42$ |
| 4. Your annual salary.  | $t(760) = 3.525, p < .001$<br>$M\ 1999 = 2.96$<br>$M\ 2005 = 2.5$  |
| 5. The community's image of school administrators.  | $t(760) = 2.973, p < .003$<br>$M\ 1999 = 2.65$<br>$M\ 2005 = 2.36$ |
| 6. All things considered, indicate your overall level of job satisfaction.                | $t(761) = 2.290, p < .022$<br>$M\ 1999 = 2.08$<br>$M\ 2005 = 1.91$ |

## Years served as a principal:

## 1-5 years category

- |  |  |
|--|--|
| 1. All things considered, indicate your overall level of job satisfaction. | $t(327) = 2.078, p < .038$<br>$M\ 1999 = 2.04$<br>$M\ 2005 = 1.80$ |
|--|--|

## 6-10 years

- |   |  |
|---|--|
| 1. Extracurricular activities placed on principal.                              | $t(237) = 2.736, p < .007$<br>$M\ 1999 = 3.20$<br>$M\ 2005 = 2.73$ |
| 2. Time available for activities that put balance in the life of the principal. | $t(237) = 2.792, p < .006$<br>$M\ 1999 = 3.82$<br>$M\ 2005 = 3.35$ |

3. Your annual salary.  $t(237) = 2.001, p < .047$   
 $M$  1999 = 2.92  
 $M$  2005 = 2.54

4. Time spent on leadership activities.  $t(237) = 3.256, p < .001$   
 $M$  1999 = 3.20  
 $M$  2005 = 2.67

#### 11-15 years

1. Time available for activities that put balance in the life of the principal.  $t(203) = 3.404, p < .001$   
 $M$  1999 = 3.82  
 $M$  2005 = 3.19

2. Relationship with the parents of your school.  $t(203) = 2.125, p < .035$   
 $M$  1999 = 1.78  
 $M$  2005 = 1.54

3. Your annual salary.  $t(203) = 2.181, p < .030$   
 $M$  1999 = 3.07  
 $M$  2005 = 2.62

4. All things considered, indicate your overall level of job satisfaction.  $t(203) = 2.185, p < .030$   
 $M$  1999 = 2.18  
 $M$  2005 = 1.86

#### 26-30 years

1. Relationship with the parents of your school.  $t(74) = -2.448, p < .028$   
 $M$  1999 = 1.59  
 $M$  2005 = 2.00

#### Years served in their present school

##### 1-5 years

1. The adequacy of administrative support provided for the principal.  $t(581) = -2.037, p < .042$   
 $M$  1999 = 2.17  
 $M$  2005 = 2.40

## 6-10 years

- |   |  |
|---|--|
| 1. Relations with the board of education..  | $t(252) = 2.632, p < .009$<br>$M\ 1999 = 2.21$<br>$M\ 2005 = 1.74$ |
| 2. The consistency of the board in making decisions in the best interest of students. | $t(252) = 3.456, p < .001$<br>$M\ 1999 = 2.40$<br>$M\ 2005 = 1.80$ |
| 3. How well the board of education acknowledges your accomplishments.                 | $t(252) = 2.605, p < .010$<br>$M\ 1999 = 2.80$<br>$M\ 2005 = 2.30$ |
| 4. Your annual salary.  | $t(252) = 3.338, p < .001$<br>$M\ 1999 = 3.00$<br>$M\ 2005 = 2.44$ |
| 5. Time spent on leadership activities.   | $t(252) = 2.579, p < .012$<br>$M\ 1999 = 3.09$<br>$M\ 2005 = 2.72$ |
| 6. The process the superintendent uses to evaluate you.                               | $t(252) = 2.397, p < .017$<br>$M\ 1999 = 2.52$<br>$M\ 2005 = 2.08$ |

## 11 or more years

- |  |  |
|--|--|
| 1. Relations with the teachers of your school. | $t(248) = 2.455, p < .016$<br>$M\ 1999 = 1.53$<br>$M\ 2005 = 1.32$ |
|--|--|

## Type of school

## Elementary schools

- |   |  |
|---|--|
| 1. The process the superintendent uses to evaluate the principal. | $t(535) = 2.831, p < .005$<br>$M\ 1999 = 2.47$<br>$M\ 2005 = 2.11$ |
|---|--|

### Middle/Junior High Schools

1. Community demands placed on the principal outside of the school.	$t(205) = 2.902, p < .004$ $M 1999 = 2.73$ $M 2005 = 2.11$
2. Time available for activities that put balance in the life of the principal.	$t(205) = 3.151, p < .002$ $M 1999 = 3.68$ $M 2005 = 3.14$
3. Relationship with the board of education.	$t(205) = 2.417, p < .017$ $M 1999 = 2.18$ $M 2005 = 3.14$
4. The consistency of the board in making decisions in the best interest of the children.	$t(205) = 2.783, p < .006$ $M 1999 = 2.45$ $M 2005 = 1.96$
5. How well the board of education acknowledges your accomplishments.	$t(205) = 2.632, p < .009$ $M 1999 = 2.82$ $M 2005 = 2.29$
6. Your annual salary.	$t(205) = 4.974, p < .001$ $M 1999 = 3.06$ $M 2005 = 2.29$
7. The community's image of school administrators.	$t(205) = 3.255, p = .002$ $M 1999 = 2.66$ $M 2005 = 2.18$
8. The process the superintendent uses to evaluate the principal.	$t(205) = 2.296, p < .024$ $M 1999 = 2.52$ $M 2005 = 2.14$
9. All things considered, indicate your overall level of job satisfaction.	$t(205) = 2.043, p < .042$ $M 1999 = 2.11$ $M 2005 = 1.86$

### Research Question 3

Is there a significant relationship between time spent on educational leadership activities and management tasks and overall job satisfaction?

Principals in the 1999 study indicated the level of their overall job satisfaction with time spent on leadership activities and time spent on management tasks compared with overall level of job satisfaction. To measure the strength of association or relationship between these elements and the overall level of job satisfaction, a two-tailed Pearson Correlation procedure was conducted.

Results of the analysis showed a statistically significant positive moderate correlation between time spent on leadership activities and overall job satisfaction  $r(891) = +.317$ ,  $r^2 = .1004$ ,  $p < .01$ . These results indicated a positive relationship between time spent on leadership activities and overall job satisfaction. In overall job satisfaction, 10.4% of the variance could be accounted for satisfaction with time spent on leadership activities.

Results of the analysis revealed a statistically significant positive moderate correlation between time spent on management tasks and overall job satisfaction  $r(891) = +.317$ ,  $r^2 = .1004$ ,  $p < .01$  indicating positive relationship between these factors. In overall job satisfaction 10.4% of variance could be accounted for satisfaction with time spent on management tasks.

The same correlation process was used in the 2005 study where principals indicated the level of their overall job satisfaction with time spent on leadership activities

and time spent on management tasks. These answers were compared with overall level of job satisfaction.

Results of the analysis showed a statistically significant positive moderate correlation between time spent on leadership activities and overall job satisfaction  $r(192) = +.385$ ,  $r^2 = .1482$ ,  $p < .01$ . This indicated a positive relationship between time spent on leadership activities and overall job satisfaction with 14.82% attributed to time spent on leadership activities.

Results of the analysis also revealed that there was a statistically significant positive moderate correlation between time spent on management tasks and overall job satisfaction  $r(192) = +.387$ ,  $r^2 = .1497$ ,  $p < .01$ . This indicated a positive relationship between these factors with 14.97% of variance accounted for satisfaction with time spent on management tasks.

#### Research Question 4

Has there been a significant change from the 1999 to the 2005 study in motivators and hygiene factors for principals' job satisfaction as defined by Herzberg's Two-Factor Theory?

The job satisfaction questionnaire of 20 factors was used to determine the level of job satisfaction of Iowa elementary, middle/junior high, and high public school principals regarding motivator and hygiene factors. Principals in the 1999 and 2005 studies indicated the level of their job satisfaction with these factors. The data were then analyzed (mean, standard deviation, independent  $t$ -test) and divided into two groups. In order to determine the degree to which the respondents used the motivators and hygiene

factors, a total mean was computed. Upon completion of the results it was discovered that the mean for the motivator factors in the 1999 study was 2.63 and for 2005 study it was 2.51. The mean for hygiene factors in the 1999 study was 2.29, while in the 2005 study it was 2.18. These results showed that Iowa principals were more satisfied with hygiene factors than with motivators. This is a contradiction with Herzberg's theory, which posited that motivators are the only factors that lead to job satisfaction. The results also showed higher satisfaction scores in the 2005 study for both motivators and hygiene factors than in the 1999 study.

The independent *t*-test indicated statistically significant differences for the 1999 and the 2005 study in these motivator factors:

- |  |   |
|--|---|
| 1. How well the board of education acknowledges principal's accomplishments. | $t(1082) = 2.107, p < .035$<br>$M\ 1999 = 2.72$<br>$M\ 2005 = 2.52$ |
| 2. The community's image of a school administrator.                          | $t(1082) = 2.034, p < .043$<br>$M\ 1999 = 2.65$<br>$M\ 2005 = 2.48$ |
| 3. The process the superintendent uses to evaluate you.                      | $t(1070) = 3.023, p < .003$<br>$M\ 1999 = 2.46$<br>$M\ 2005 = 2.20$ |

The independent *t*-test indicated statistically significant differences for the 1999 and the 2005 study in these hygiene factors:

- |   |   |
|---|---|
| 1. Time available for activities that put balance in a principal's life.                  | $t(1081) = 2.157, p < .031$<br>$M\ 1999 = 3.68$<br>$M\ 2005 = 3.50$ |
| 2. The consistency of the board in making decisions in the best interest of the children. | $t(1083) = 2.530, p < .012$<br>$M\ 1999 = 2.31$<br>$M\ 2005 = 2.08$ |



3. Your annual salary.

$t(1082) = 3.626, p < .001.$

$M$  1999 = 2.97

$M$  2005 = 2.64

Table 125

*Motivators in the 1999 and the 2005 Studies*

Mean for 1999 study: 2.63

Mean for 2005 study: 2.51

Factors	1999-2005 Study	<i>N</i>	<i>M</i>	<i>SD</i>
1. The sense of accomplishment a principal receives from the work.	1999	890	1.73	.706
	2005	193	1.79	.828
2. Professional growth opportunities provided for you.	1999	890	2.13	.943
	2005	193	2.11	.931
3. Extracurricular activities placed on you as a principal.	1999	892	3.07	.976
	2005	193	2.90	1.023
4. The community demands placed on you as a principal.	1999	891	2.63	1.111
	2005	193	2.58	1.180
5. How well the board of education acknowledges your accomplishments.	1999	891	2.72	1.212
	2005	193	2.51	1.275
6. The community's image of the school administrators.	1999	891	2.65	1.023
	2005	193	2.48	1.041
7. Time spent on management tasks.	1999	892	3.13	.985
	2005	193	3.05	1.009
8. Time spent on leadership activities.	1999	892	3.17	1.050
	2005	193	3.05	1.052

(table continues)

Factors	1999-2005 Study	N	M	SD
9. The process the superintendent uses to evaluate you.	1999	879	2.46	1.182
	2005	193	2.19	1.067

Table 126

*Hygiene Factors in the 1999 and 2005 Studies*

Mean in the 1999: 2.29

Mean in the 2005: 2.18

Factors	1999 -2005 Study	N	M	SD
1. The adequacy of administrative services provided for you..	1999	891	2.21	1.095
	2005	193	2.31	.906
2. The adequacy of support services provided for you.	1999	888	2.47	.943
	2005	193	2.45	1.020
3. Time available for activities that put balance in your life.	1999	890	3.68	1.087
	2005	193	3.49	1.071
4. Relationship with the administrative team/cabinet.	1999	892	1.89	1.032
	2005	193	1.81	1.083
5. Relationship with the board of education.	1999	887	2.11	1.079
	2005	193	1.98	1.094
6. Relationship with the parents of the school.	1999	891	1.74	.666
	2005	193	1.71	.674

(table continues)

Factors	1999-2005	<i>N</i>	<i>M</i>	<i>SD</i>
7. Relationship with the teachers of the school.	1999	891	1.62	.687
	2005	193	1.57	.719
8. The consistency of the board in making decisions in the best interest of children.	1999	892	2.31	1.139
	2005	193	2.07	1.127
9. Your annual salary.	1999	891	2.97	1.181
	2005	193	2.63	1.096
10. The quality of your relationship with the superintendent.	1999	886	1.89	1.103
	2005	193	1.77	1.054

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### Summary

This chapter included three parts. In the first part the data from the 1999 study describing the population of the study and characteristics of respondents were reviewed with reported results of the research questions presented in Chapter 1.

The second part of the chapter included data results for the 2005 study with a description of the population of the study and with the data related respondents' demographics. The results of the research questions were presented.

The third part of the chapter concluded with a comparison designed to measure the results of the 2005 study to the results of the 1999 study.

## CHAPTER 5

### SUMMARY, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

#### Introduction

The primary purpose of this study was to examine the job satisfaction of Iowa public school principals and contrast their current job satisfaction to the perceptions six years previously. Additional study allowed the researcher to look at the current demographic components of Iowa public school principals as contrasted with the 1999 study. Further analysis examined the job satisfaction of Iowa public school principals based on sex, years served as principals, years served as principals in their present school, and the type of school. Finally, it was intended to determine the relationship between job satisfaction and leadership and management tasks and whether there was a significant change from 1999 to 2005 in motivators and hygiene factors for principals' job satisfaction as defined by Herzberg's theory.

Determining the job satisfaction level of principals in Iowa may provide insight into the support principals need in order to feel satisfaction in their jobs and, thus, remain in the principalship for a longer time. It is also important to understand why the school principal position is becoming less popular (Else & Sodoma, 1999; Cooley & Shen, 1999).

A survey methodology was used to obtain valuable data. A cover letter, along with the study's job satisfaction questionnaire was mailed in the 1999 study to all 1174 Iowa public school principals. In the 2005 study, job satisfaction questionnaires were sent to 300 Iowa public school principals stratified by random sampling and proportionally

drawn to the number of principals in Iowa to get needed data. The questionnaire was designed to collect demographic data, factors that inhibited the effectiveness of principals, issues of greatest urgency in schools, stress, increased responsibilities and accountabilities, data about shortage of principals, and questions for measurement of motivator and hygiene job satisfaction factors addressed by Herzberg in his Two-Factor Theory. The factors included in the questionnaire were related to the job itself and represented by Herzberg's motivators as *recognition, responsibility, and work itself*. Hygiene factors were related to the work context and were represented by the categories *school policy and administration, personal life, interpersonal relations with peers, interpersonal relations with superiors, interpersonal relations with subordinates, interpersonal relations with parents, and salary*. Principals were asked to rate their satisfaction level with each factor and with their overall level of job satisfaction as well. The return of the questionnaires was 76% in the 1999 study and 64.3% in the 2005 study.

Herzberg's Two-Factor Theory, claims that the factors leading to job satisfaction are motivators or intrinsic factors of the job and factors leading to job dissatisfaction are hygienes or extrinsic factors of the job. This theory is often utilized in educational settings (Hoy & Miskel, 1996). While some studies supported results of Herzberg's theory (Schwartz, Jenusaitis, & Stark, 1963; Moxley, 1977, Rasmussen, 1990), other studies only partially supported his theory (Graham & Messner, 1998; Lacey, 2000) or did not support his theory at all (King, 1970, Bockman, 1971, Steers & Porter, 1979; Davis, 1982). The mixed results in the research could be explained by different

approaches researchers used in their studies or by the use of different instruments or chosen techniques to measure job satisfaction.

### Summary

Demographic data collected indicate that the principals who participated in both the 1999 and the 2005 studies were predominantly male and white. Over three-fourth (78.4%) of the respondents in the 1999 study were 41-60 years of age versus 71.5% in the 2005 study. A majority of the respondents in the 1999 study (52.6%) and in the 2005 study (51.3%) had served as principals for 1-10 years. Considering their experience in their present school, more than half of the respondents in both studies had served 1-5 years.

In the 1999 study 52.2% of the respondents were elementary principals versus 45.6% of respondents in the 2005 study. Middle/junior high school principals made 17.7% of the respondents in the 1999 study versus 25.4% in the 2005 study. Thirty-one percent of the respondents were high school principals in the 1999 study while high school principals represented 29% of the respondents in the 2005 study.

### Research Question 1

What is the overall level of job satisfaction of Iowa public school principals?

In response to this question, the overall mean of job satisfaction was 2.04 in the 1999 study versus 1.90 in the 2005 study. The principals were *moderately satisfied* with overall job satisfaction in the 1999 study while in the 2005 study they were *very satisfied* with overall job satisfaction. Mean scores as shown in Tables 5 and 67 determined satisfaction levels.

Sub-Question a: What is the overall level of job satisfaction according to sex, years served as a principal, years served in their present school, and school type?

In response to this question relative to the overall job satisfaction by sex, female principals in the 1999 study were *very satisfied* and male principals were *moderately satisfied* with overall job satisfaction. In the 2005 study female principals were *very satisfied* in overall job satisfaction. Male principals were slightly less satisfied but still *very satisfied* with overall job satisfaction.

When looking at years served as a principal, those serving 26-30 years in the principalship in the 1999 study were *very satisfied* with overall job satisfaction. Other groups of principals, serving 21-25 years and 31 and more years were slightly less satisfied but still *very satisfied* with overall job satisfaction. Other groups serving as principals were *moderately satisfied*. For the 2005 study, the highest satisfaction was for principals serving 1-5 years. These principals were *very satisfied* with overall job satisfaction. Other groups of principals serving 6-10 and 11-15 years in the principalship were slightly less satisfied but still *very satisfied*. All other groups were *moderately satisfied*.

In years served in their present school, the most satisfied principals had served 11 and more years and were *very satisfied* with overall level of job satisfaction. All other groups serving in this category had lower means but were still *very satisfied*. In the 2005 study, the highest satisfaction was for principals serving in their present schools 6-10 years. These principals were *very satisfied* with overall job satisfaction. All other groups had lower means but were also *very satisfied*.

Elementary school principals in the 1999 study were *very satisfied* with overall job satisfaction. Principals of middle/junior high schools and high school were *moderately satisfied*. In the 2005 study, the highest satisfaction was for middle/junior high school principals who were *very satisfied* with overall job satisfaction. Elementary and high school principals while slightly less satisfied were still *very satisfied* with overall job satisfaction.

Sub-Question b: What is the level of job satisfaction for each of the 20 factors of Iowa public school principals?

In response to this question, the highest satisfaction levels in 1999 were for (a) relationship with the teachers, (b) sense of accomplishment principals receive from their work, (c) relationship with the parents. In these three factors principals were *very satisfied*. In the 1999 study principals were least satisfied with (a) time available for activities that put balance in your life, (b) time spent on management tasks, and (c) time spent on leadership activities. They were *neutral* with all of these activities on the questionnaire scale.

In the 2005 study, the highest satisfaction scores were observed for (a) relationship with the teachers, (b) relationship with the parents and (c) the quality of principal's relationship with the superintendent. Principals were *very satisfied* with all of these factors. In the 2005 study, principals were least satisfied with (a) time available that put balance in the life of a principal, (b) time spent on management tasks, (c) extracurricular activities placed on you as a principal. For the first two job factors principals were *neutral*, while principals were *moderately satisfied* with the last factor.



Relationship with parents and superintendents were very satisfying in both studies. Areas of least satisfaction in both studies were time available to put balance in their lives and time spent on management tasks.

Sub-Question c: What is the satisfaction level for each of the 20 factors according to sex of principals, years served as a principal, years served in their present school, and type of school?

1. The sense of accomplishment a principal receives from the work.

The higher satisfaction in 1999 and 2005 studies were observed for female principals. They were *very satisfied* with the sense of accomplishment they feel in their work. Although male principals were slightly less satisfied they were still *very satisfied* with the sense of accomplishment in both studies.

Those who were *very satisfied* in the 1999 study had served as principals more than 31 years. In other categories of years served as a principal, respondents were *moderately satisfied*.

In the 2005 study, the most satisfied group of principals had served 21-25 years. They were *very satisfied* with the sense of accomplishment. The group of principals serving 31 and more years in the principalship were *moderately satisfied* while other groups were *very satisfied* with the sense of accomplishments they receive from the their work.

In both studies the more experienced principals were more satisfied with their sense of accomplishment.

In years served in their present school, the highest satisfaction in both studies was in the 11 and more years category. These principals were *very satisfied* with the sense of accomplishment. All other categories had lower means but also were *very satisfied* in both studies.

In the type of school category, the highest satisfaction for both studies was observed for elementary schools. These principals were *very satisfied* with sense of accomplishment with exception of middle/junior high school principals, who were *moderately satisfied* in the 2005 study.

## 2. Professional growth opportunities provided for you.

In both studies female principals were *very satisfied* with professional growth opportunities. Male principals were *moderately satisfied* in both studies.

Those most satisfied as principals in the 1999 study had served 31 and more years in the principalship. They were *very satisfied* with professional growth opportunities. In all other categories the principals were *moderately satisfied*. In the 2005 study the highest satisfaction was for principals with 11-15 and 16-20 years of experience. They were *moderately satisfied* with professional growth opportunities. All other categories of principals were slightly less satisfied but still *moderately satisfied*.

The highest satisfaction level in the 1999 was for those serving 6-10 years in their present school. These principals were *moderately satisfied* with the professional growth opportunities. In other categories, principals were slightly less satisfied but still *moderately satisfied*. The highest score in the 2005 study was for principals serving 11

and more years who were *very satisfied* with the professional growth opportunities. All other categories were *moderately satisfied*.

In the type of school category the highest satisfaction for both studies was observed for elementary principals who were *moderately satisfied* with professional growth opportunities. All other categories were slightly less satisfied but still *moderately satisfied* in both studies.

### 3. The adequacy of administrative support provided for principals.

The highest satisfaction for this factor in both studies was for male principals. They were *moderately satisfied* with administrative support. Female principals had lower satisfaction means but also were *moderately satisfied* in both studies.

The highest satisfaction in 1999 was for those serving as a principal 1-5 years and in the 2005 study, for 21-25 years. In both studies, principals were *moderately satisfied* with administrative support. All other groups of principals were slightly less satisfied but still *moderately satisfied* in both studies.

The most satisfied in the 1999 study were principals who served in their present schools 1-5 years while in the 2005 study, the most satisfied principals were serving 11 and more years. In both studies, the principals were *moderately satisfied* with the administrative support. All other groups of principals had lower means but also were *moderately satisfied*.

In the type of school category, the highest satisfaction level in the 1999 study was for high schools principals, and in the 2005, study for middle/junior high school principals. These principals were *moderately satisfied* with the administrative support

services. All other groups of principals were slightly less satisfied in both studies but still *moderately satisfied*.

#### 4. The adequacy of support services provided for principal.

The highest satisfaction in the 1999 study was for males, while in 2005 study, the highest satisfaction was for females. In both studies the female and male principals were *moderately satisfied* with the adequacy of support services.

Those *moderately satisfied* as a principal in the 1999 and 2005 studies served 21-25 years in the principalship. With the exception of principals who had served 26-30 years in the 2005 study, who were *neutral*, all other groups in both studies had a slightly lower means but were also *moderately satisfied*.

The highest satisfaction was in both studies was for those serving 11 and more years in their present school who were *moderately satisfied* with the adequacy of support services. All other groups of principals in both studies were slightly less satisfied but still *moderately satisfied*.

In the 1999 study, *moderately satisfied* principals in the type of school category were high school principals. In the 2005 study, *moderately satisfied* principals were in middle/junior high schools. In both studies, the principals of other groups were slightly less satisfied but still *moderately satisfied* with the adequacy of support services.

#### 5. Community demands placed on principals outside of the school.

The highest satisfaction in the 1999 and 2005 studies was for female principals. In both studies, females and males were *moderately satisfied* with the community demands outside of the schools.

Those most satisfied as a principal in 1999 had served 31 and more years in the principalship while in the 2005 those serving 21-25 years were most satisfied. In both studies, these principals were *moderately satisfied* with the community demands outside of the school. Nearly all other groups of principals were slightly less satisfied but still *moderately satisfied*. However, in the 2005 study principals serving 31 and more years were *neutral*.

Principals serving in their present school 11 and more years were *moderately satisfied* in the 1999 study. In the 2005 study principals serving in present school 6-10 years were moderately satisfied. In both studies, all other groups of principals had slightly lower means but were also *moderately satisfied* with the community demands outside of the school.

In the type of school category, principals of elementary schools were *moderately satisfied* in the 1999 study while in 2005 study principals of middle/junior high schools were *moderately satisfied*. In both studies, all other groups of principals were slightly less satisfied but still *moderately satisfied* with the community demands outside of the school.

6. Extracurricular demands placed on principal.

The highest satisfaction level in the 1999 and 2005 studies was for female principals. In both studies, female principals were *moderately satisfied* with extracurricular activities. Male principals were *neutral* in the 1999 study and in the 2005 study.

Those most satisfied principals in the 1999 study had served 26-30 years compared to principals serving 6-10 years in the 2005 study. In both studies, these

principals were *moderately satisfied* with demands of extracurricular activities. The groups of principals in the 1999 study serving 1-5 and 26-30 years with slightly lower means were also *moderately satisfied*. All other groups of principals were *neutral*. In the 2005 study, groups of principals serving 1-5, 11-15, and 26-30 years were slightly less satisfied but still *moderately satisfied*. All other groups of principals were *neutral* with extracurricular demands placed on principals outside the school.

Principals serving 1-5 years in their present school were the most satisfied in the 1999 study. They were *neutral*. All other groups were slightly less satisfied but were also *neutral*. In the 2005 study, the *moderately satisfied* group of principals was those serving 1-5 years in their present school. The group serving 6-10 years was slightly less satisfied but still *moderately satisfied*, while principals serving 11 and more years in their present school were *neutral*.

In the type of school category, elementary school principals were *moderately satisfied* in the 1999 study. Principals of middle/junior high schools, and high schools were *neutral*. In the 2005 study, the highest satisfaction was for elementary principals who were *moderately satisfied*. Middle/junior high school principals were slightly less satisfied but still *moderately satisfied*, while high school principals were *neutral*.

#### 7. Time available for activities that put balance in the life of the principal.

The highest satisfaction in the 1999 study was for male principals and in the 2005 study for female principals. In both studies the principals were *neutral*.

Those most satisfied as principals in the 1999 study served 26-30 years in the principalship compared to those serving 11-15 years in the principalship in the 2005

study. In both cases, these principals were *neutral* with the time available for activities that put balance in the life of principals. All other groups of principals had slightly lower means but were also *neutral*.

The most satisfied in the 1999 study were principals serving 11 and more years in their present schools compared to those serving 6-10 years in the 2005 study. In both cases, the principals were *neutral* with the time available for activities that put balance in the life of principals. All other groups of principals had lower means but also were *neutral*.

In the type of school category, the most satisfied in 1999 were elementary school principals. In the 2005 study, the most satisfied were middle/junior high school principals. In both studies principals were *neutral* with the time available that puts balance in the life of principals. All other groups in both studies had lower means but also were *neutral*.

#### 8. Relationship with the administrative team/cabinet.

Male principals had the highest satisfaction in the 1999 and 2005 studies. They were *very satisfied* with the relationship with the administrative team/cabinet. Female principals were *moderately satisfied* in the 1999 study and *very satisfied* in the 2005 study.

Those *very satisfied* as principals in the 1999 study were principals who had served 6-10 years in the principalship. The group of principals serving 31 and more years was *moderately satisfied*. All other groups in the 1999 study were slightly less satisfied but still *very satisfied*. In the 2005 study, the *very satisfied* group was principals serving

6-10 years. The groups of principals serving 1-5, 16-20, and 21-25 years in the principalship were slightly less satisfied but were in the *moderately satisfied* category. All other groups were *neutral*.

In the 1999 study, principals who had served 6-10 years in their present school were *very satisfied*. All other groups were slightly less satisfied but also *very satisfied*. In the 2005 study the highest satisfaction was for principals serving 1-5 years in their present school. These principals were *very satisfied*. The other group of principals serving 11 and more years with a slightly lower mean was also *very satisfied* when compared to the group serving 6-10 years in their present school, which were *neutral*.

In the type of school, high schools principals were *very satisfied* in the 1999 study compared to middle/junior high school principals in the 2005 study. In both studies, all other groups of the principals were slightly less satisfied but still *very satisfied* with the relationship with the administrative team/cabinet.

#### 9. Relationship with the board of education.

The highest satisfaction in the 1999 study was for female principals. In 2005 study, the highest satisfaction was for male principals. In both studies, these principals were *moderately satisfied* with the board of education.

Those most satisfied as principals in the 1999 study had served 31 and more years in the principalship. They were *very satisfied*. All other groups served as principals had slightly lower means but also were *moderately satisfied*. In the 2005 study the most satisfied were principals with 21-25 years experience in the principalship. This group of principals was *moderately satisfied*. Other groups who had served in principalship 1-5,



and 6-10 years were slightly less satisfied but still *moderately satisfied*. All other groups were *neutral*.

The most satisfied in the 1999 study were principals serving 11 and more years in their present school. This group of principals was *moderately satisfied*. All other groups were slightly less satisfied but also *moderately satisfied* category. In the 2005 study, the most satisfied were principals who had served in their present schools 6-10 years. This group was *very satisfied* with the relationship with the board of education. All other groups of principals were *moderately satisfied*.

In the type of school category, high school principals were most satisfied ranking themselves as *moderately satisfied*. All other groups had lower means but also were *moderately satisfied*. In the 2005 study, principals *very satisfied* were from middle/junior high schools. The principals of high schools had a slightly lower mean but were also *very satisfied*, while principals of elementary schools were *moderately satisfied*.

#### 10. Relationship with the parents of your school.

Female principals had the highest satisfaction in the 1999 study. In the 2005 study, the most satisfied were male principals. In both studies, these principals were *very satisfied* with the relationship with the parents.

Those *very satisfied* as principals in the 1999 study served 31 and more years in the principalship. All other groups were slightly less satisfied but still *very satisfied* category. In the 2005 study the most satisfied group of principals were those principals with 21-25 years of experience who were *very satisfied* with the relationship with parents. With the exception of principals in the principalship who had served 26-30 and 31 and

more years and who were *moderately satisfied*, all other groups of principals were *very satisfied*.

The most satisfied in the 1999 and 2005 studies were principals who served 11 and more years in their present schools. These principals were *very satisfied* with the relationship with the parents. All other groups of principals in both studies had slightly lower means but also were *very satisfied*.

Principals of elementary schools in both studies were *very satisfied* with the relationship with the parents. All other groups of principals in both studies were slightly less satisfied but still *very satisfied* with relationships with the parents.

#### 11. Relationship with the teachers of your school.

The highest satisfaction in both studies was for female principals who were *very satisfied*. Male principals had slightly lower means but also were *very satisfied* with the relationship with teachers in the 1999 and 2005 studies.

Those most satisfied as principals in the 1999 study were principals serving 31 and more years in the principalship. In the 2005 study, the most satisfied were principals who had served 26-30 years in the principalship. In both studies, these principals were *very satisfied* with the relationship with the teachers. All other groups of principals had slightly lower means but were also *very satisfied*.

The highest satisfaction in 1999 was for those principals serving 6-10 years in their present school. In the 2005 study, the most satisfied principals were those with 11 and more years of experience in present schools. In both studies these principals were

*very satisfied* with the relationship with the teachers. All other groups of principals had lower means in both studies but also were *very satisfied*.

In the 1999 study, the most satisfied were elementary principals and, in the 2005 study, middle/junior high school principals. In both studies these principals were *very satisfied* with the relationship with the teachers. All other groups of principals in both were studies *moderately satisfied*.

#### 12. The consistency of the board in making decisions in the best interest of children.

In the 1999 and 2005 studies male principals were *moderately satisfied* with the consistency of the board in making decisions in the best interest of children. In 1999 and 2005, female principals had lower means but also were *moderately satisfied*.

Those most satisfied as principals in the 1999 study served 31 and more years in the principalship. This group of principals was *moderately satisfied*. All other groups were slightly less satisfied but still in the *moderately satisfied* category. In the 2005 study, the most satisfied group of principals were those serving in the principalship 1-5 years. This group of principals was *very satisfied*. All other groups of principals were *moderately satisfied*.

The highest satisfaction was in the 1999 study for those principals serving in present schools 1-5 years. These principals were *moderately satisfied*. All other groups were slightly less satisfied but still in the *moderately satisfied* category. In the 2005 study, *very satisfied* principals were those with 6-10 years of experience in their present schools. All other groups were *moderately satisfied* with the consistency of the board in making decisions in the best interest of children.

In the 1999 study, the highest satisfaction was for high school principals who said they were *moderately satisfied*. All other groups of principals had lower means but also were *moderately satisfied*. In the 2005 study the most satisfied principals were from middle/junior high schools. This group was *very satisfied* with the consistency of the board in making decisions in the best interest of students. All other groups were *moderately satisfied*.

13. How well the board of education acknowledges your accomplishments.

Female principals had the highest satisfaction in the 1999 study. They were *moderately satisfied*. Male principals were slightly less satisfied but also *moderately satisfied*.

In the 2005 study, the highest satisfaction was for male principals. They were *moderately satisfied* with how well the board of education acknowledges the principal's accomplishments. Female principals had a lower mean but also were *moderately satisfied*.

Those most satisfied as principals in the 1999 study served 1-5 years in the principalship and were *moderately satisfied*. All other groups had slightly lower means but were also *moderately satisfied*. In the 2005 study, the most satisfied group of principals were those who had served in the principalship 6-10 years. This group of principals was *moderately satisfied*. All other groups were slightly less satisfied but still *moderately satisfied*. The only group that was neutral was the group of principals serving 31 and more years in the principalship.

The most satisfied in the 1999 study were principals serving 1-5 years in their present schools. These principals were *moderately satisfied*. All other groups of principals serving in their present schools were slightly less satisfied but also *moderately satisfied*. In the 2005 study the most satisfied group of principals was those serving in present schools 6-10 years. This group of principals was in the *moderately satisfied* category. All other groups in this variable had lower means but were also *moderately satisfied*.

In the type of school category, the most satisfied in the 1999 study were principals of high schools who were *moderately satisfied*. All other groups were slightly less satisfied but still *moderately satisfied*. In the 2005 study the most satisfied were middle/junior high school principals who said they were *moderately satisfied*. All other groups had slightly lower means but were also *moderately satisfied*.

#### 14. Your annual salary.

The highest satisfaction in the 1999 and 2005 studies was for male principals. In both studies they were *moderately satisfied* while females in the 1999 study were *neutral* and in 2005 *moderately satisfied*.

Those most satisfied in the 1999 study had served 26-30 years in the principalship. These principals were *moderately satisfied* with their annual salary. Principals serving 6-10, 16-20, and 21-25 years were slightly less satisfied but still *moderately satisfied*. Principals serving 1-5, and 11-15 years were *neutral*. In the 2005 study the group of principals most satisfied served 21-25 years in the principalship. They

were *moderately satisfied* with their annual salary. All other groups of principals had lower means but also were *moderately satisfied*.

The *moderately satisfied* group in the 1999 study was principals who had served in their present schools 11 and more years. The group of principals serving 1-5 years had slightly lower mean but were also *moderately satisfied*, and the group of principals serving in present school 6-10 years was *neutral*. In the 2005 study, the *moderately satisfied* were those serving in their present schools 6 -10 years. All other groups had lower means but also were *moderately satisfied*.

In the type of school category in 1999, high school principals were *moderately satisfied*. Elementary principals with a lower mean were also *moderately satisfied*, while middle/junior high school principals were *neutral*. In the 2005 study, the highest satisfaction was for middle/junior high school principals who were *moderately satisfied* with their annual salary. All other groups of principals were slightly less satisfied but still in the *moderately satisfied* category.

#### 15. The community's image of school administrator.

Female principals showed the highest satisfaction in the 1999 study. They were *moderately satisfied*. Male principals were slightly less satisfied but also *moderately satisfied*. In the 2005 study the highest satisfaction was for male principals who were *moderately satisfied* with the community's image of school administrators. Female principals had a lower mean but were also *moderately satisfied*.

Those most satisfied as principals in the 1999 study served 31 and more years in the principalship. These principals were *moderately satisfied*. All other groups served as

principals had lower means but were also *moderately satisfied*. In the 2005 study, the most satisfied group of principals served in the principalship 21-25 years. These principals were *moderately satisfied*. All other groups had lower means but also were *moderately satisfied*.

The highly satisfied in the 1999 and 2005 studies were principals who had served 11 and more years in their present schools. These principals were *moderately satisfied* with the community's image of school administrators. All other groups of principals in both studies were slightly less satisfied but still *moderately satisfied*.

In the type of school category, in the 1999 study the most satisfied were high school principals and in the 2005 study, middle/junior high school principals. These groups of principals were *moderately satisfied*. All other groups of principals had lower means in both studies but were also *moderately satisfied*.

#### 16. Time spent on management tasks.

The highest satisfaction in the 1999 study was found in male principals. They were *neutral* in their evaluation of the time spent in management tasks. Although female principals had a lower mean, they also were *neutral*. In the 2005 study male principals still showed the highest satisfaction. Female principals with a slightly lower mean were also in the *neutral* category.

Those most satisfied as principals in 1999 study had served 26-30 years in the principalship. This group of principals was *moderately satisfied*. Those serving 31 and more years had a slightly lower means but were still *moderately satisfied*. All other

groups were *neutral*. In the 2005 study, the group of principals who had served in the principalship 6-10 years was *moderately satisfied*. All other groups were *neutral*.

The highest satisfaction in the 1999 study was for those principals serving 11 and more years in their present schools. These principals were *moderately satisfied*. All other groups were *neutral*. In the 2005, the highest satisfaction was for principals serving in their present schools 6-10 years. They were *moderately satisfied* with time spent on management tasks. All other groups were *neutral*.

In the type of school category, elementary school principals were *neutral* to the time spent on management tasks. Middle/junior high and high school principals had a lower mean but also were *neutral*. In the 2005 study, middle/junior high school principals were *moderately satisfied* with the time spent on management tasks. Elementary and high school principals were *neutral*.

In the 1999 study, 11.5% of Iowa public school principals spent less than 25 % on management tasks, 57.5 % spent 26-65%, and 31% spent more then 65% of their daily time on the management of their schools. In the 2005 study, 9.3% spent less then 25%, 61.2% spent 26-65%, and 29.5% spent more then 65% of their daily time for management of their schools. These numbers show that this trend was unchanged during the six years between studies. Statistics for time in management activities were very similar in both studies.



#### 17. Time spent on leadership activities.

The highest satisfaction score in the 1999 study was for male principals. They were *neutral* in their evaluation of the time spent on leadership activities. Female principals were also *neutral* with a lower mean score. In the 2005 study, the highest satisfaction was for female principals who were *moderately satisfied* with the time spent on leadership activities. Males were *neutral*.

Those most satisfied as principals in the 1999 study had served 26-30 years in the principalship. This group of principals was *moderately satisfied*. The groups of principals serving 16 - 20 and 21 - 25 years in the principalship were slightly less satisfied but still in the *moderately satisfied* category. All other groups were *neutral*. In the 2005 study the most satisfied group of principals were those serving in the principalship 6-10 years. These principals were *moderately satisfied* with time spent on leadership activities. The group of principals serving 31 and more years in the principalship had a lower mean but also was *moderately satisfied*. All other groups of principals were *neutral*.

The highest satisfaction in the 1999 study for number of years in the principalship was the group of principals serving in present schools 11 and more years. These principals were *neutral*. All other groups were slightly less satisfied but still *neutral*. In the 2005 study, the most satisfied group of principals served in their present schools 6 - 10 years. These principals were *moderately satisfied* with time spent on leadership activities. All other groups serving were *neutral*.

In the school type category *the highest level of satisfaction* in the 1999 study was principals of elementary schools who were *neutral*. Principals of middle/junior high and

high schools had lower means but also were *neutral*. In the 2005 study, principals of middle/junior high schools were *moderately satisfied* with time spent on leadership activities. Principals of elementary and high schools were *neutral*.

In the 1999 study, 67.1% of principals spent less than 25% of their daily time for leadership activities, 30.4% spent 26-66%, and 2.5% spent more than a 65% on leadership activities. In the 2005 study, 48.2% of principals spent less than 25% on leadership activities, 49.2% spent 26-65% and only 2.6% of principals spent more than 65% of their daily time on educational leadership activities.

#### 18. The quality of principal's relationship with the superintendent.

Male principals had the highest satisfaction in the 1999 study. They were *very satisfied* with the quality of the relationship with the superintendent. Female principals were slightly less satisfied but also were *very satisfied*. In the 2005 study, female principals were *very satisfied* while male principals had a lower mean but were also *very satisfied*.

Those most satisfied as principals in the 1999 study were those serving 6-10 years. They were *very satisfied*. All other groups of principals except one had slightly lower means but were *very satisfied*. However, principals serving in the principalship 16-20 years were *moderately satisfied*. In the 2005 study most satisfied were principals serving in the principalship 6-10 years. They said they were *very satisfied* with their relationship with the superintendent. With slightly lower means groups serving 1-5, 11-15, 16-20, and 26-30 years in the principalship were also very satisfied. All other groups were *neutral*.

The highest satisfaction in both the 1999 and 2005 studies on this factor was for those principals serving in their present schools 1-5 years. These principals were *very satisfied*, while all other groups in both studies had lower means but also were *very satisfied*.

Principals of elementary schools in 1999 were *very satisfied* with the quality of the relationship with the superintendent. Principals of middle/junior high and high schools principals were slightly less satisfied but still *very satisfied*. In the 2005 study, principals of high schools were *very satisfied*. Principals of middle/junior high and elementary schools had lower means but also were *very satisfied* with the relationship with the superintendent.

#### 19. The process the superintendent uses to evaluate principals.

The highest satisfaction in 1999 study found was in male principals who were *moderately satisfied*. Female principals with a lower mean were also *moderately satisfied*.

However, in the 2005 study, females had the highest satisfaction. They were *moderately satisfied* with the process the superintendent uses to evaluate them. Male principals had a slightly lower mean but were also *moderately satisfied*.

Those most satisfied as principals in the 1999 study based on years as principals were those who served 31 and more years. This group of principals was *moderately satisfied*. All other groups were slightly less satisfied but still *moderately satisfied*. In the 2005 study, the most satisfied group of principals were those serving in the principalship

1-5 years. This group of principals was *moderately satisfied*. All other groups serving as principals had lower means but also were *moderately satisfied*.

The highest satisfaction in 1999 was for those principals serving 11 and more years in their present schools. These principals were *moderately satisfied*. All other groups serving in their present schools were slightly less satisfied but still *moderately satisfied*. In the 2005 study, the highest satisfaction was for those principals serving 6-10 years in their present school. These principals were *moderately satisfied* with the process the superintendent uses to evaluate principals. All other groups of principals for this variable had lower means but also were *moderately satisfied*.

In the type of school category the highest satisfaction in the 1999 study was for high school principals who were *moderately satisfied*. Elementary and middle/junior high school principals were slightly less satisfied but still *moderately satisfied*. In the 2005 study, elementary schools principals were the most satisfied group. They were *moderately satisfied* with the process the superintendent uses to evaluate principals. Middle/junior high school principals and high school principals had lower means but also were *moderately satisfied* with the process superintendents use to evaluate principals.

#### Research Question 2

Is there a significant difference in Iowa principals' job satisfaction in the 2005 study when contrasted with the 1999 study in overall level job satisfaction?

Overall, the principals in the 2005 study were more satisfied than those in the 1999 study. In 1999, the principals were *moderately satisfied*, and in 2005, they were *very satisfied*. Statistically significant differences were found for overall job satisfaction

between the two studies. Principals in the 2005 study were significantly more satisfied than those in the 1999 study.

Sub-Question a: Is there a significant difference in overall job satisfaction in 2005 when contrasted with job satisfaction in 1999 according to sex, years served as a principal, years served in their present school, and type of school?

One significant difference was found for male principals. Males in the 2005 study were significantly more satisfied than males in the 1999 study. No significant differences were found for female principals. Between male principals and female principals the study found female principals in 2005 were more satisfied with overall job satisfaction than male principals.

In number of years served as a principal the significant differences were found for two categories – 1-5 years category and 11-15 years. The results indicated that these groups of principals were significantly more satisfied with the overall job satisfaction in 2005 study than in 1999 study.

There was no significant difference in years served in their present school and overall job satisfaction.

In type of school category, the statistical significance was found for middle/junior high schools. They appeared to have been more satisfied in the 2005 study than in the 1999 study.

Sub-Question b: Is there a significant difference in satisfaction level for each of the 20 job factors in the 1999 study when contrasted to the 2005 study?

In response to this question, significant differences were found for (a) time available that put balance in the life of principals, (b) consistency of the board in making decisions in the best interest of students, (c) how well the board of education acknowledges your accomplishments, (d) annual salary; (e) the community's image of the school administrator; (f) the process the superintendent uses to evaluate principals, and (g) all things considered, indicate your overall level of job satisfaction. Principals in the 2005 study appeared to be significantly more satisfied in all of these factors than principals in the 1999 study.

Sub-Question c: Is there a significant difference in Iowa principals' job satisfaction level in 2005 when contrasted with job satisfaction in 1999 for each of the 20 factors according to sex, years served as a principal, years served in their present school, and type of school?

In response to this question, statistical significance was found for female principals in (a) the process the superintendent uses to evaluate principals. Female principals appeared to have been more satisfied with this factor in the 2005 study.

Statistically significant differences for male principals were found in (a) the relationship with the board of education, (b) consistency of the board in making decisions in the best interest of the children, (c) how well the board of education acknowledges a principal's accomplishments, (d) annual salary, (e) the community's image of the school administrator, and (e) all things considered, indicate your overall level of job satisfaction. In all of these factors, male principals were more satisfied in the 2005 study than in the 1999 study.

In years served as a principal, a statistical significance was found for principals serving 1-5 years in their indication of overall job satisfaction. The principals serving in the principalship 1-5 years appeared to have been more satisfied in the 2005 study than the same category of principals in the 1999 study.

Significant differences were found for principals serving 6-10 years in the principalship in (a) extracurricular activities placed on a principal, (b) time available for activities that put balance in the life of principal, (c) annual salary, and (d) time spent on leadership activities. Principals serving in principalship 6-10 years in the 2005 study appeared to have been more satisfied in all of these factors than principals of the same category in the 1999 study.

In the category of 11-15 years served, significant differences were found in (a) time available for activities that put balance in the life of principal, (b) relationship with the parents of the principal's school; (c) annual salary, and (d) all things considered, indicate your overall level of job satisfaction. Principals in the 2005 study were significantly more satisfied with all of these categories in 2005 than in 1999.

In the category 26 -30 years, significant differences were found in the relationship with the parents of the school. Principals in the 1999 study appeared to be significantly more satisfied with their relationship with the parents than principals in the 2005 study.

In years served in their present school, significant differences were found for the 1-5 years category in the adequacy of administrative support provided for the principal. Principals in the 1999 study appeared to have been significantly more satisfied with the adequacy of administrative support than principals in the 2005 study.

Significant differences were found in the 6-10 years category for the (a) relationship with the board of education, (b) consistency of the board in making decisions in the best interest of students, (c) how well the board of education acknowledges principal's accomplishments, (d) annual salary, (e) time spent on leadership activities, and (f) the process superintendent uses to evaluate principals. Principals in the 2005 study were significantly more satisfied in all of these factors.

In the 11 and more years category, a statistical significance was found for the relationship with the teachers. Principals in the 2005 study were significantly more satisfied with the relationship with the teachers than principals in the 1999 study.

In the type of school category, a statistically significant difference was seen for elementary schools for the process the superintendent uses to evaluate the principals. Principals in 2005 study appeared significantly more satisfied with the process the superintendent uses to evaluate principals than in 1999.

Significant differences were found for middle school principals in (a) the community demands placed on the principal outside of the school, (b) time available for activities that put balance in the life of a principal, (c) the relationship with the board of education, (d) consistency of the board in making decisions in the best interest of the children, (e) how well the board of education acknowledges your accomplishments, (f)



annual salary, (g) the community's image of the school administrators, (h) the process the superintendent uses to evaluate the principals, and (i) all things considered indicate your overall level of job satisfaction. In all of these factors, principals were significantly more satisfied in the 2005 study than in the 1999 study.

There were no statistically significant differences for high school principals between the 2005 than in the 1999 study.

### Research Question 3

Is there a significant relationship between time spent on management tasks, time spent on leadership activities, and overall job satisfaction?

Weak significant correlations of both time spent on management tasks and overall job satisfaction and time spent on leadership activities and overall job satisfaction were found in 1999 and also in the 2005. The results indicated a positive relationship between time spent on management tasks and overall job satisfaction, and between time spent on leadership activities and overall job satisfaction. This positive correlation indicates that as the value of one variable increases, the value of the other variable also tends to increase. The more time spent on management tasks the higher the overall satisfaction.

### Research Question 4

Has there been a significant change from the 1999 study to the 2005 study in motivators and hygiene factors for principals' job satisfaction as defined by Herzberg's Two-Factor Theory?

When looking at the motivators, results show found differences in (a) how well the board of education acknowledges a principal's accomplishments, (b) the community's

image of school administrator, and (c) the process the superintendent uses to evaluate principals. Principals appeared to be more satisfied with all of these motivators in the 2005 study than in the 1999 study. These three factors are factors of recognition.

Results for hygiene factor differences were found in (a) time available for activities that put balance in the life of principals, (b) consistency of the board in making decisions in the best interest of the children and (c) annual salary. Principals in the 2005 study were more satisfied with these hygiene factors than principals in the 1999 study.

### Conclusions

This study was intended to assess, through questionnaires, the job satisfaction of public elementary, middle/junior high, and high school principals in Iowa.

Job satisfaction was measured through 20 questions in a questionnaire. The results show that principals were overall more satisfied in 2005 than in 1999 study. From the descriptive statistics perspective examined by sex, years served as principals, years served in their present schools, and type of school, the overall satisfaction score has varied between highest mean score of 1.80 (*very satisfied*) and lowest mean score of 2.28 (*moderately satisfied*).

When comparing the 1999 and 2005 studies, significant differences are seen only between male principals in both studies. Thus, there is a significant discrepancy between how male respondents perceived and rated their overall job satisfaction in comparison to their female colleagues. No significant difference is seen between males and females in both studies.

The results for overall job satisfaction are found different in the 1999 study and in the 2005 study for principals serving in the principalship 1-5 and 11-15 years, and for middle junior/high school principals.

Principals in 2005 are more satisfied than they were in 1999. This is interesting because during these six years greater focus has been placed on raising student achievement and closing the achievement gap through pressures to show proficiency in the growth mandated by the No Child Left Behind Act (2001). All school districts also experienced two budget cuts as educational funding experienced minimal allowable growth. In some Iowa school districts student populations became much more culturally diverse. So why are Iowa public school principals more satisfied in 2005? One can only speculate that principals feel more responsibility for student success. Perhaps they see themselves more as educational and instructional leaders than in the past. Principals tend to have a close working relationship with teachers, parents, board of education members and other stakeholders. Perhaps the additional pressures since 1999 have improved the relationship to work together.

Principals expressed high satisfaction with the 20 factors on the Iowa satisfaction questionnaire. The results show that significantly different factors with lower satisfaction scores in both studies reached higher satisfaction means in 2005 study. On the other hand, these results call attention to the fact that principals are still very busy and overwhelmed by school activities not only during the work days but many times also on weekends. In both studies, principals continued to be less satisfied with time spent on management tasks and time spent on educational leadership tasks, extracurricular activities, and with

time for activities that put balance in the life of principals. These problems result in principals leaving the principalship and teachers or other school administrators licensed for K-12 schools not wanting to enter the principalship (Behrens, 2003). Principals need support so they spend less time on management tasks and more time on leadership activities. Schools also need to reduce demands outside of the school so principals have more time to put balance in their lives.

The research refers to the fact that principals spend much more time on management tasks than on educational leadership activities. The results of both the 1999 and 2005 studies confirm this trend. This trend contradicts the expectations of the public, who want principals to be educational leaders of their school, not just only managers of school affairs (Else & Sodoma, 1999, Rayfield & Diamantes, 2003). In both studies, principals are spending less time on leadership activities that causes less satisfaction in their jobs.

Principals are also less satisfied with the image they have as community school administrators. A discrepancy exists between principals and the school board's consistency in making decisions in the best interests of students and in how well the board of education acknowledges principals' accomplishments. These recognition factors point out that principals are very sensitive to their superiors' evaluation of their work. Their professional view of educational problems and expertise are confronted by the community's and board's view, and their opinions on questions of everyday school activities are sometimes exposed to the unnecessary tension between school board and principals. However, this does not seem to impact their overall satisfaction with the job.

On the other hand, interpersonal relationships with teachers, parents, and superintendents are high in both studies. Principals in Schmidt's study (1976) showed more problems with interpersonal relationships with subordinates. The results in Smith's study reflect increased tension between principals and teachers. This is not the case of the current study. In 1999 and also in 2005, the relationships with teachers, and parents were high and principals say they are *very satisfied or moderately satisfied with these relationships*. Principals give high ratings to these hygiene factors in both studies.

The results of the Iowa studies do not reflect Herzberg's theory that posits that hygiene factors fail to provide positive satisfaction because "they do not possess the characteristics necessary for giving an individual a sense of growth" (p. 80). Yet results of the 1999 and the 2005 studies show high scores in professional growth opportunities. This points out the good work of school districts in the areas of school policy and administration.

Principals with more experience have a higher satisfaction with their sense of accomplishment than principals with less experience. These findings are the same in both studies. The studies found that the principals were satisfied in their current position and they perceived satisfaction in their career in the principalship.

Another interesting fact is how females and males perceive some factors. While statistically significant differences are seen between females in both studies on only one motivator factor, (the process the superintendent uses to evaluate principals), six significant differences are seen between male principals in both studies. These include two motivators (how well the board of education acknowledges principal's

accomplishment and the community's image of school administrators), three hygiene factors (consistency of the board in making decisions in the best interest of students, relationship with the board of education, and annual salary), and in overall job satisfaction. In all of these factors, principals were more satisfied in the 2005 study than in the 1999 study. Male principals in the 1999 and the 2005 study were more satisfied with annual salary than female principals. These findings are consistent with Graham and Messner's (1998) study. In addition, Gates, Ringel, Santibanez, Chung, and Ross (2003) found that women received comparable pay for the same work in the public sector.

When looking at years of experience in the principalship, results show principals with more experience have a higher satisfaction level with the sense of accomplishment. This trend appears in both studies. Less experienced principals have more problems in leading their schools at the beginning of their career than older and more experienced principals. In both studies, more experienced principals are also very satisfied with the relationship with the parents. In other words, more years in the principalship and more years of experience lead to better understanding of the changing nature of the job and to higher job satisfaction. The number of years principals serve in their present schools indicates that principals serving 1-5 years are less satisfied in the 2005 study with the adequacy of administrative support provided for principals than in the 1999 study. Do newly appointed principals need more time to show their ability? Do they need more time to build relationships with colleagues, teachers, or the board of education?

When looking at the category of principals who served 6-10 years in their present schools, differences appear in the areas of school policy and administration, recognition,

salary and work itself. The relationship with the teachers is significant for principals serving 11 years and more in their present schools. On the other hand, the mean scores for all of these factors are significantly higher in the 2005 study than in the 1999 study. Why are principals more satisfied? Is it because districts now have better school policy? Do principals have better relationships with superintendents? Is the process a superintendent uses to evaluate principals better? Do the principals now have higher salaries than 2005 six years ago?

The results when looking at type of schools show that most differences are found at middle/junior high school level in the areas of community demands, time available that puts balance in the life of principals, relationship with the board of education, consistency of the board in making decisions in the best interest of students, how well the board of education acknowledges principals' accomplishments, salary, community's image of school administrators, the process the superintendent uses to evaluate principals, and overall job satisfaction. The satisfaction with these motivator and hygiene factors is higher in the 2005 study. However, no differences are seen for high school principals.

Weak positive correlations are found between time spent on management tasks and overall job satisfaction and time spent on leadership activities and overall job satisfaction in both studies.

Differences in the 1999 study and 2005 study are found in three motivator factors and three hygiene factors. Principals are more satisfied in the 2005 study than in 1999 study with recognition, personal life, school policy and administration, and salary.

The results of this research show that Iowa public school principals are more satisfied with the hygiene factors than with the motivators in both studies. Thus, this study does not support Herzberg's Two-Factors theory that only motivators lead to job satisfaction and hygiene factors lead to job dissatisfaction. The results of 1999 and 2005 studies also contradict Ford et al. (1968) who claimed that only individuals who prefer motivators should be considered as candidates for administrative positions. All other candidates who prefer hygiene factors should be regarded as undesirable candidates for administrative positions. On the other hand, Sergiovanni (1987) claimed that effective principals are concerned with both motivators and hygiene factors.

#### Implications

To motivate principals into higher performance, motivation factors are needed. Schools need a clear understanding of what principals personally find satisfying or dissatisfying about their jobs. This is a task for school districts, boards of education, and superintendents. Principals as middle level managers compare their possibilities and opportunities for promotion and professional growth with other categories of managers. More autonomy in personal management, redesign expectations, reevaluation of their workload, and compensation will lead to higher job satisfaction and higher motivation for principals. It is necessary to reduce time demands, improve salaries, and increase administrative support and support services. University preparation programs, pre-service, and in-service training have to make more effort to better prepare potential candidates for principalship. New principals have to be prepared to face all aspects of their new jobs. They have to be prepared for longer working time, time pressures, how to



deal with stress, budget cuts, and other tasks that draw large amounts of principals' time. Principals need good skills in leadership, management, in communication and the decision making process. Thus, if we want to attract new people into school administration, we must ensure that the job meets needs of those who are interested in entering the principalship.

To retain principals, we must enable principals to develop and utilize their expertise and ability. If job satisfaction is to remain high, we need to address problems principals face and look for ways to help them to work effectively and productively. It is necessary to reduce management tasks and to increase time for leadership. In spite of budget cuts and school financial problems, it would be useful for boards of education and superintendents to hire assistant principals for schools with higher student populations. More women are needed for the principalship, mainly at the high school level. In the 2004-2005 school year 35.5% of principals in Iowa were females. The research indicates that women principals are as efficient and productive as their male colleagues (Daft, 1999; Pigford & Tonnsen, 1993). The differences in sex are not related to the function of school management or leadership. Because of more culturally diverse student populations it is also necessary to hire minority principals. The current ethnical diverse number of principals is small in Iowa.

The findings of this research provide insight into the job satisfaction of Iowa public school principals in 1999 and 2005. The results should be beneficial to state legislators, district administrators, boards of education, and superintendents in redefining job responsibilities and for a better understanding of the complexity of the job.

### Recommendations for Further Study

As a result of this investigation, the following recommendations are made for further study:

1. A follow-up study of randomly selected principals using the original Herzberg's interview technique to verify whether the Two-Factor Theory is valid, when the data are gathered using the original methodology in educational settings.
2. A replication study using the Job Descriptive Index, Job In General Scale, Minnesota Satisfaction Questionnaire, or other instruments to expand the knowledge base on principal job satisfaction.
3. A follow-up study in private schools to see whether there is a difference in job satisfaction between private and public school principals in Iowa.
4. A qualitative study to provide greater insight into the factors which impact job satisfaction of Iowa public school principals to obtain information on why principals are satisfied or dissatisfied in their jobs.
5. Longitudinal research after five years among Iowa public school principals to compare the job satisfaction results over a period of time.

## REFERENCES

- Alderfer, C. P. (1969). An empirical test of a new theory of human needs. *Organizational Behavior and Human Performance*, 4, 142-175.
- Alderfer, C. P. (1972). *Existence, relatedness, and growth: Human needs in organizational settings*. New York: The Free Press.
- Alderfer, C. (1977). A critique of Salancik and Pfeffers's examination of need satisfaction theories. *Administrative Science Quarterly*, 22, 658-659.
- Alderfer, C. P., & Guzzo, R. A. (1979). Life experiences and adults enduring strength of desires in organizations. *Administrative Science Quarterly*, 24(3), 247-361.
- American Association of School Administrators. (1981). *Survey: Attitudes toward women as school district administrators*. Arlington, VA: Educational Research Service.
- Archer, J. (2002). Leadership groups hope to launch advanced certification. *Education Week*, 6(21), 14-19.
- Argyris, C. (1982). *Reasoning, learning and action: Individual and organizational*. San Francisco, CA: Jossey-Bass.
- Ashton, F. L. (1989). Connecticut middle school principals' job satisfaction with respect to selected motivators and hygienics. (Doctoral dissertation, The University of Connecticut, Storrs, 1989). *Dissertation Abstract International*, 50 (11), 3421A. (UMI No. AAT 90007860).
- Barry, D. A. (2002). Job satisfaction and leadership style: A study of Michigan high school principals. (Doctoral dissertation. Western Michigan University, Kalamazoo, 2002). *Dissertation Abstracts International* 63 (09), 3063A. (UMI No. AAT 3065396).
- Behrens, G. M. (2003). *Factors associated with the decision not to become 7-12 principals by those holding the license*. Unpublished doctoral dissertation. University of Northern Iowa, Iowa.
- Bell, C., & Chase, C. (1993). The underrepresentation of women in school leadership. In C. Marshall, (Ed.), *The new politics of race and gender: The 1992 Yearbook of the Politics of Education Association* (pp.140-154). London: Falmer.
- Bennis, W., & Nanus, B. (1985). *Leaders: Strategies for taking charge*. New York: Harper & Row.

- Bieger, G. R., & Gerlach, G. J. (1996). *Educational research: A practical approach*. Albany: Delmar Publishers.
- Biklen, S. K., & Branningan, M. (1980). *Women in educational leadership*. Lexington, MA: DC Health.
- Bittel, L. R., & Newstrom, J. W. (1990). *What every supervisor should know*. St. Louis: McGraw-Hill, Inc.
- Blackman, M. C., & Fenwick, L. T. (2000). The principalship: Looking for leaders in a time of change. *Education Week*, 3(19), 68-70.
- Bockman, V. M. (1971). The Herzberg controversy, *Personnel Psychology*, 24, 155-189.
- Bodeian, A. G., Farris, G. R., & Kacmar, K. M. (1992). Age, tenure, and job satisfaction: A tale of two perspectives. *Journal of Vocational Behavior*, 40(1), 33-48.
- Border, H. R. (2004). Job satisfaction of Florida's middle school assistant principals as a factor for preserving an administrative workforce. (Doctoral dissertation, University of Central Florida, Orlando, 2004). *Dissertation Abstract International*, 65 (06), 2031A. (UMI No. AAT 3134673).
- Borg, W. R., & Gall, M. D. (1989). *Educational research: An introduction*. (5<sup>th</sup> ed). New York: Longmann.
- Borquist L. C. (1987). Job satisfaction in a public suburban school district. (Doctoral dissertation, Portland State University and University of Oregon, 1987). *Dissertation Abstract International*, 48 (02) 260A. (UMI No. AAT 8711931).
- Brady, D. B. (2001). *Correlates of job satisfaction among California school principals*. (Doctoral dissertation, University of Southern California, 2001). *Dissertation Abstract International*, 62 (09), 2931. (UMI No. AAT 3027695).
- Bridges, R. L. (1995). The relationship of job satisfaction with ten independent variables: A study of Arkansas secondary assistant principals. (Doctoral dissertation, University of Arkansas, Little Rock, 1995). *Dissertation Abstract International* 56 (07), 2495A. (UMI No. AAT 9536016).
- Brogan, G. B. (2003). Job satisfaction of Idaho high school principals. (Doctoral dissertation, Idaho State University, Pocatello, 2003). *Dissertation Abstract International* 64 (02), 345. (UMI No. AAT 3082995).

- Brokke, D. (2002). *Determinants of job satisfaction and job dissatisfaction of administrators in the American Association of Christian Schools*. Paper presented at Congress on Christian School Education, Huntington, West Virginia.
- Brown, J. S. (1970). Risk propensity in decision making: A comparison of business and public school administrators, *Administrative Science Quarterly*, 9, 42-53.
- Bryant, L. R. (2001) An investigation of factor influencing job satisfaction of principals in low performing and exemplary schools. (Doctoral dissertation, Fayetteville State University, North Carolina, 2001). *Dissertation Abstract International* 62 (10), 3247A. (UMI No. AAT 3027005).
- Bureau of Labor Statistics. (1996-1997). *Occupational outlook handbook*, 1996-1997 [Data file]. Available from <http://stats.bls.gov/oco/>
- Burke, S. M. (1995). Job satisfaction of elementary teachers in Alberta county schools. (Doctoral dissertation, University of Alberta, Canada, Edmonton., 1990). *Dissertation Abstract International*, 56 (11), 4214A. (UMI No. NNO1669).
- Burr, R. K. (1989). Job satisfaction determinants for selected administrators in Florida's community colleges and universities: An application of Herzberg's motivator-Hygiene theory. (Doctoral dissertation, University of Florida, Orlando, 1980). *Dissertation Abstract International*, 41 (09), 3794A. (UMI No. AAT 8105563).
- Button, H. W. (1993). City schools and schools systems: Sources of centralization and bureaucratization. In S. Rothstein (Ed.), *Handbook of school in urban America*, (pp. 43-66). Westport, CT: Greenwood.
- Camman, C., Fichman, M., Jenkins, D., & Klesh, J. (1979). *The Michigan Organizational Assessment Questionnaire*. Unpublished manuscript, University of Michigan, in Ann Arbor.
- Campbell, J. P., Dunnette, M. D., Lawler, E. E., & Weik, K. E. (1970). *Managerial behavior, performance and effectiveness*. New York: McGraw Hill.
- Campbell, J. P., & Pritchard, R D. (1976). Motivation theory in industrial and organizational psychology. In M. D. Dunnette (Ed.). *Handbook of industrial and organizational psychology* (pp.65-130). Chicago: Rand McNally.
- Cates, S. (1984). *An examination of the applicability of Frederic Herzberg's motivation theory to administrators in the American association of Christian schools*. Unpublished doctoral dissertation, Bob Jones University, Greenville, SC.

- Catt, S., & Miller, D. S. (1989). *Human relations: A contemporary approach*. Homewood, Illinois: Richard D. Irwin, Inc.
- Chase, F. S. (1951). Factors for satisfaction in teaching. *Phi Delta Kappan*, 33, 127-132.
- Chen, K. (2000). Job satisfaction among high school assistant principals in the state of Mississippi. (Doctoral dissertation, Mississippi State University, Starkeville, 2000). *Dissertation Abstract International*, 61 (04), 1232A. (UMI No. AAT 9970379).
- Cherington, D. J. (1991). Needs theories of motivation. In R. M Steers & L. W. Porter (Eds.). *Motivation and work behavior* (pp.31-44). New York: McGraw-Hill.
- Chidester, T. R., & Grigsby, W. Ch. (1984). A Meta-Analysis of the goal-setting Performance literature. *Academy of Management Proceedings*, 44, 202-206.
- Chubb, J. E. (1987). *Effective schools and the problems of the poor. Policy options for the future education*. The Brookings Institution: Washington, D.C. UD 026 334.
- Cohen, J. (1977). *Statistical power analysis for the behavioral sciences*. (Rev. ed). New York: Academic Press.
- Cole, R. J. (1940). A survey of employee attitudes. *Public Opinion Quarterly*, 4, 497-506.
- Colvin, R. (2000 June 28). A premium on principals. *Los Angeles Times*, p. A2.
- Cook, J. D., Hepworth, S. J., Wall, T. D., & Warr, P. B. (1981). *The experience of work*. New York: Academic Press.
- Cooley, V., & Shen, J. (1999). Who will lead? The top ten factors that influence teachers moving into administration. *NASSP Bulletin*, 83(606), 75-80.
- Council of Chief State School Officers (1996). *Interstate school leaders licensure consortium: Standards for school leaders*. Washington, DC: Council of Chief State School Officers.
- Crow, G. M., Mecklowitz, B., & Weekes, Y.N. (1992). *From teaching to administration: A preparation institute*. Lancaster, PA: Technomic Publishing Company.
- Cuban, L. (1988). *The managerial imperative and the practice of leadership in schools*. Albany: State University of New York press.

- Daft, R. L. (1999). *Leadership. Theory and practice*. Orlando, FL: The Dryden Press. Publishers.
- Davis, B. (1982). Herzberg's theory of job satisfaction: A Reexamination. (Doctoral dissertation, The University of Wisconsin, Madison, 1982). *Dissertation Abstract International*, 43 (07), 2175A. (UMI No. AAT 8216236).
- Degnan, V. M (1985). Critical incidents of job satisfaction and dissatisfaction of regional education attendance area (REAA) principals in Alaska. (Doctoral dissertation, East Texas State University, 1986. *Dissertation Abstracts International*, 46 (12), 3547A. (UMI No. AAT 8603173).
- Delgado, L. L. (2001). Correlates of job satisfaction among high school principals. (Doctoral dissertation, University of Southern California, Los Angeles., 2001). *Dissertation Abstract International* 62 (09), 2934A. (UMI No. AAT 3027711).
- Dill, N. W. (1988). Tennessee's male and female secondary principals: A comparison of demographic and career factors. (Doctoral dissertation, Tennessee State University, Tennessee, Nashville. 1988). *Dissertation Abstract International* 48 (11), 2771A. (UMI No. AAT 8802641).
- Dillman, D. A. (2000). *Mail and internet surveys: The tailored design method*. New York: John Wiley & Sons.
- Donaldson, G., & Hausman, C. (1999). What makes principals feel successful? *NASSP Bulletin*, 83(608), p. 64-76.
- Doud, J. L., & Keller, E.P. (1998). *The K-8 principal in 1998: A 10 year study of the national association of elementary school principals*. Alexandria, VA: NAESP.
- DuFour, R. (1991). *The principal as staff developer*. National Educational Service, Bloomington, Indiana.
- Duke, D. L. (1988). Why principals consider quitting? *Phi Delta Kappan*, 70, 308-312.
- Dunn, J. D., & Stephens, E. C. (1972). *Management of Personnel*. New York: McGraw-Hill.
- Dunnette, M. D. (1965 April). Factor structures of unusually satisfying and unusually dissatisfying job situations for six occupational groups. Paper read at the Midwestern Psychological Association, St. Louis.

- Eckman, E. W. (2000). The high school principalship: A women perspective. (Doctoral dissertation, The University of Wisconsin, Milwaukee, 2000). *Dissertation Abstract International*, 61 (04), 1234A. (UMI No AAT 9969440).
- Eckman, E. W. (2004). Similarities and differences in role conflict, role commitment, and job satisfaction for female and male high school principals. *Educational Administration Quarterly*, 40(3), 366-387.
- Edmonds, R. (1979). Effective school for the urban poor. *Educational Leadership* 37, 15-24.
- Educational Research Service, National Association of Elementary Principals, National Association of Secondary School Principals. (1998). *Is there a shortage of qualified candidates for openings in the principalship?* An exploratory study. Retrieved September 12, 2001, from [www.naesp.org/misc/shortage.htm](http://www.naesp.org/misc/shortage.htm).
- Educational Research Service. (2000). *The principal, keystone of a high achieving school: Attracting and keeping the leaders we need*. Arlington, VA: National Association of Elementary School Principals and National Association of Secondary School principals.
- Else, D. (1998). *Superintendent job satisfaction survey*. Unpublished manuscript. University of Northern Iowa in Cedar Falls.
- Else, D., & Sodoma, B. (1999). *Principal shortage and job satisfaction survey*. Cedar Falls: University of Northern Iowa, Institute for Educational Leadership.
- Evans, S. C. (2002). The relationship between the career path and professional background characteristics of assistant principals in Philadelphia area high schools and job satisfaction (Pennsylvania). (Doctoral dissertation, Widener University, Chester, 2002.). *Dissertation Abstracts International* 64 (03), 735A. (UMI No. AAT 3086352).
- Ewen, R. B. (1964). Some determinants of job satisfaction: A study of generality of Herzberg's theory. *Journal of Applied Psychology*, 48, 161-163.
- Fenwick, L., & Pierce, M. (2001). The principal shortage: Crisis or opportunity? *Principal*, 80(4), 24-32.
- Ferrandino, V. L., & Tirozzi, G.N. (2000). Attracting and keeping the leaders we need. *Education Week*, 3. Retrieved December 9, 2001 from [www.naessp.org/misc/edweek\\_article\\_3-22-00.htm](http://www.naessp.org/misc/edweek_article_3-22-00.htm)



- Ferrandino, V. L., & Tirozzi, G.N. (2000) The shortage of principals continues. *NESSP*, Retrieved December 10, 2001 from [http://www.nassp.org/news/views/prin\\_short1000.htm](http://www.nassp.org/news/views/prin_short1000.htm)
- Ferrandino, V. L., & Tirozzi, G.N. (2001). Accountability without authority. *Education Week 5*, Retrieved December 9, 2001 from [www.naessp.org/edweek\\_article\\_12-05-01.htm](http://www.naessp.org/edweek_article_12-05-01.htm)
- Ferrandino, V. L. & Tirozzi, G. N. (2003). Spotlight on schools in the middle. *NASSP*. Retrieved December 4, 2003 from <http://www.naesp.org/views>
- Flanagan, J. C. (1954). The critical incident technique. *Psychological Bulletin*, 51, 327-358.
- Fraenkel, J. R., & Wallen, N. E. (2000). *How to design and evaluate research in education*. (4<sup>th</sup> ed.). New York: McGraw-Hill.
- Friedlander, F. (1963). Underlying sources of job satisfaction, *Journal of Applied Psychology*, 47, 246-250.
- Friesen, D., Holdaway, E. A., Rice, A. W. (1983). Satisfaction of school principals with their work, *Educational Administration Quarterly*, 19(4), 35-38.
- Ford, R. N., Borghata, F. F., & Bohrnstedt, G. W. (1968). The work components study: A revised set of measures for work motivation. *Multivariate Behavior Research*, 3, 403-414.
- Foster, W. (1984). *Toward a critical theory of educational administration in leadership and organizational culture*. Urbana: University of Illinois Press.
- Fryer, D. (1926). Industrial dissatisfaction. *Industrial Psychology I*, p. 25-29
- Fullan, M. & Hargreaves, A. (1996). *What's worth fighting for in your school?* New York: Teachers College Press.
- Gates, S., Ringel, J., Santibanez, L, Chung,C., & Ross, K. (2003). *Who is leading our schools?* Santa Monica, CA: RAND.
- Gendel, H. L. (1965). *The motivation to work in hospital housekeeping workers*. Unpublished doctoral dissertation, Case Western Cleveland University, Ohio.

- Gould, D. M. W. (1987). Relationships between demographic characteristics and job satisfaction variables based on perceptions of selected Arkansas public school elementary principals (Frederic Herzberg). (Doctoral dissertation, Memphis State University, Tennessee, 1987). *Dissertation Abstract International*, 48 (04), 788A. (UMI No. AAT 8715830).
- Graen, G. B. (1965, April). *The Differential perceptions of work motivations by high and low satisfied engineers*. Paper read at the Midwestern Psychological Association, Chicago.
- Graham, S. (1991). A Review of Attribution Theory in Achievement Context. *Educational Psychology Review*, 3, 539.
- Graham, M. W., & Messner P. E. (1998). Principals and job satisfaction. *International Journal of Educational Management* 12(5),196.
- Greska, T. J. (2003). Job satisfaction of middle school assistant principals in North Carolina. (Doctoral dissertation, The University of Mississippi, 2003). *Dissertation Abstract International* 64 (05), 1475A. (UMI No. AAT 3089853).
- Guthrie, J. W. (1990). The evolution of educational management: Eroding myths and emerging models. In B. Mitchell & L. Cunningham (Eds.), *Educational leadership and changing contact of families, communities, and schools* (pp. 210-231). Chicago: University of Chicago Press.
- Guthrie, J. W. & Reed, R. J. (1991). *Educational administration and policy: Effective leadership to American schools*. (2nd ed.). Englewood Cliffs, NJ: Prentice-Hall.
- Hackman, J. R., & Oldham G. R. (1975). Development of the Job Diagnostic Survey. *Journal of Applied Psychology*, 60, (2), 159-170.
- Hardman, T. R., Leary, P. A., & Toth, P. E. ( 1996). Job satisfaction of female public school administrators in West Virginia. *National Forum Journals*, 1-5.
- Harvey, B. C., & France, H. (1997). Manifest needs expression and job satisfaction is school administrators. *Guidance and Counselling*, 12, 32-35.
- Harvey, T. (2002). Professional vitality and the principalship: A construct validity study. (Doctoral dissertation, The University of Maine, 2002). *Dissertation Abstracts International*, 63, (06), 2062A. (UMI No. AAT 3057578).
- Heider, F. (1958). *The psychology of interpersonal relations*. New York: Wiley.

- Herzberg, F., Mausner, B., Petterson, R.O., & Capwell, D.F. (1957), *Job Attitudes: Review of research and opinion*. Pittsburgh: PA Psychological Service of Pittsburgh.
- Herzberg, F. (1971). *Work and the nature of man*. (5<sup>th</sup> ed). Cleveland: World Publishing Co.
- Herzberg, F., Mausner, B. & Snyderman, B.B. (1959). *The motivation to Work*. (2<sup>nd</sup>. ed.). New York, Willey.
- Herzberg, F., Mausner, B., & Snyderman, B.B. ( 1993). *The Motivation to Work*. The State University, New Brunswick, N. J.: Transaction Publishers. Originally published: New York: Wiley, 1959.
- Hill, N. C. (1979). *Increasing managerial effectiveness: Keys to management and motivation*. Menlo Park, Ca: Addison-Wesley Publishing.
- Hill, M. S., & Ragland, J. C. (1995). *Women as educational leaders: Opening windows, pushing ceilings*. Thousand Oaks, CA: Corvin Press.
- Hodson, R. (1989). Gender differences in job satisfaction: Why aren't women more dissatisfied? *The Sociological Quarterly*, 30, 385-399.
- Holdaway, E. A., & Johnson, N. A (1990, April). *Perceptions of overall job satisfaction and facet satisfaction of principals*. Paper presented at the annual meeting of the American Educational Research Association, Boston, MA.
- Hoppock, R. (1935). *Job Satisfaction*. New York: Harper, 1935.
- Hoy, W. K., & Miskel, C.G. (1982). *Educational administration: Theory, research, and practice* (2<sup>nd</sup> ed.). Random House, Inc.
- Hoy, W. K., & Miskel, C. G. (1996). *Educational administration: Theory, research and Practice* (5<sup>th</sup> ed.). New York: McGraw-Hill.
- Hulin, C. L., & Smith, P. C. (1976). Sex differences in job satisfaction. In Gruneberg M.M (Ed.). *Job Satisfaction-A Reader* (pp. 175-183). New York: John Wiley and Sons.
- Hunt, J. G. (1991). *Leadership: A new Synthesis*. Newbury Park, CA, Sage.

Iannone, R. (1973); What motivate principals? *Journal of Education Resrarch*, 66 (6), 260-262.

Institute for Educational Leadership. (1999). *Principal shortage and job satisfaction survey*. Cedar Falls: University of Northern Iowa.

Institute for Educational Leadership. (2000). *Leadership for student learning: Reinventing the principalship*. A report of the task force on the principalship. Washington, D.C. Institute for Educational Leadership

Iowa Department of Education. (2001). Basic educational data survey:2000-2001 staff file. In G. M. Behrens, *Factors associated with the decision not to become 7-12 principals by those holding the license*. Des Moines, Iowa.

Ironson, G. H., Smith, P. C., Brannick, M. T., Gibson, W. M., & Paul, K. B. (1989). Constitution of a job in general scale: A comparison of global, composite, and specific measures. *Journal of Applied Psychology*, 74(2), 193-200.

Jacobson, S. L. (July, 1996) School leadership in an age of reform: New directions in principal preparation. *International Journal of Educational Reform* 5(3), 271-277.

Jex, S. M., & Gudanowski, D. M. (1992). Efficacy beliefs and work stress: An exploratory study. *Journal of Organizational Behaviour*, 13(5), 509-517.

Johns, G. (1983). *Organizational behavior: Understanding life at work*. Glenview, IL: Scott, Foresman.

Johnson, J. J. (1973). Why administrators fail? *Clearing House*, 48, 3-6.

Johnson, N. & Holdaway, E. (1990). School effectiveness and principals' effectiveness and job satisfaction: a comparison of three school levels. *Alberta Journal of Educational Research*, 36, (2), 265-295.

Jones, L. C. (1990). A study of the relationship between the job satisfaction of secondary assistant principals and their perception of their principals' leader behavior. (Doctoral dissertation, The College of William and Mary, Virginia, Williamsburg, 1990). *Dissertation Abstracts International*, 51 (07), 2218A. (UMI No. AAT 9033122).

Jones, E. E., & Davis, K. E. (1965). From acts to dispositions: The attribution process in person perceptions. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (pp. 219-266). New York: Academic Press.

- Kahn, R. L. (1972). The meaning of work: Interpretation and proposals for measurement. In A. Campbell and P. E. Converse (Eds.), *The human meaning of social change* (pp.159-203). New York: Russell Sage Foundation.
- Kanfer, R. (1990). Motivation theory and industrial organizational psychology. In M.D. Dunnette and L. M. Hough (Eds.), *Handbook of Industrial and Organizational Psychology* (pp. 75-170). Palo Alto, CA: Consulting Psychologists Press.
- Kelley, H. H. (1976). Attribution in social psychology. *Nebraska Symposium on Motivation*, 15, 192-238.
- Kelly, J. D. (1989). Gender, pay and job satisfaction of faculty in journalism. *Journalism Quarterly*, 66, 446-452.
- King, N. (1970). Clarification and evaluation of the two-factor theory pf job satisfaction. *Psychological Bulletin*, 74, 18-31.
- Lacey, K. P. (2000). *Applicability of Herzberg's motivation-hygiene theory to public high school principal in the state of Maryland*. Unpublished doctoral dissertation, The George Washington University, District of Columbia, Washington D.C.
- Landy, F. J. & Becker, W. S. (1987). Motivation theory reconsidered. *Research in Organizational Behavior*, 9, 1-38.
- Latham, G. P., & Yukl, G. A. (1975). A review of research on the application of goal setting in organizations. *Academy of Management Journal*, 18(4), 824-845.
- Lawler, E. E. III. (1969). Job design and employee motivation. *Personnel Psychology*, 22, 426-434.
- Lawler, E. E. (1973) *Motivation in work organizations*. Monterey, CA: Brooks/Cole Publishing Co.
- Levenstein, A. (1935). *Die Arbeiterfrage*, Munchen: E. Reihardt, 1912. Cited in R. Hoppock, *Job Satisfaction*. New York: Harper, 1935.
- Lewis, F. M., & Daltroy, L. H. (1990). How causal explanations influence health behavior: Attribution theory. In Glanz, k., Lewis, F. M., & Rimer, B. K. (Eds.) *Health education and health behavior: Theory, research and practice*. San Francisco, CA: Jossey-Bass Publishers, Inc.

- Lezotte, L. W. (1984). *School effectiveness research: A tribute to Ron Edmonds. One Perspective on an Effective Schools' Research Agenda*. Paper presented at the Annual Meeting of the American Education Research Association (New Orleans, L.A. April 23-27. Database # ED 252961.
- Likert, R. (1932). *A technique for the measurement of attitudes*. New York: McGraw-Hill.
- Locke, E. A. (1968). Toward a theory of task motivation and incentives. *Organizational Behavior and Human Performance*, 3, 157-189.
- Locke, E. A. (1969). What is job satisfaction? *Organizational Behavior and Human Performance* 4, 309-336.
- Locke, E. (1976). The nature and causes of job satisfaction. In Dunnett (Ed.), *Handbook of industrial and organizational psychology* (pp. 1297-1349). Chicago, IL: Rand McNally.
- Locke, E. A. (1991). The Motivation sequence, the motivation hub, and the motivation core. *Organizational Behaviour and Human Decision Processes*, 50, 288-299.
- Locke, E. A., Fitzpatrick, W., & White, F. M. (1983). Job satisfaction and role clarity among university and college faculty. *Review of Higher Education*, 6, (4), 343-365.
- Locke, E. A., & Latham, G. P. (1984). *Goal Setting; A Motivational Technique That Works*. Englewood Cliffs, NJ: Prentice-Hall.
- Locke, E. A., & Latham, G. P. (1990). *A Theory of Goal Setting and Task Performance*. Englewood Cliffs, NJ: Prentice-Hall.
- Lofquist, L., & Dawis, R. (1969). *Adjustment to work*. New York, Meredith Cooperation.
- Long, F. A. (1989). *Connecticut middle school principals job satisfaction with respect to selected motivators and hygienes*. Unpublished doctoral dissertation, university of Connecticut, Storrs;
- Loscocco, K. A., & Roschelle, A. R. (1991). Influences on the quality of work and non-work life. *Journal of Vocational Behavior*, 39(2), 182-225.
- Lunenburg, F. C., & Ornstein, A. C. (2000). *Educational administration. Concept and practices*. (3<sup>rd</sup> ed). Belmont, CA: Wadsworth/Thomas Learning.

- Mack, P. A. (2000). *Perspectives on principals on job satisfaction*. Unpublished doctoral dissertation, Georgia State University, Atlanta.
- Malinowsky, M. R., & Barry, J. R. (1965). Determinants of work attitudes. *Journal of Applied Psychology*, 49(6), 446-451.
- Marshall, C. (1993). *The unsung role of the career assistant principal*. Reston, Va.: National Association of Secondary School Principals.
- Maslow, A. (1970). *Motivation and Personality* (2<sup>nd</sup> ed.). New York: Harper & Brothers.
- May, Ch. R. (1986). *Job satisfaction of chief administrative officers of teacher education programs*. Unpublished doctoral dissertation, Peabody College for Teachers of Vanderbilt University, Tennessee.
- Mayo, E. (1945). *The social problem of an industrial civilization*. Boston: Harvard University, Graduate School of Business Administration.
- McCaslin, V. L., & Mwangi, J. (1994) Job satisfaction of Kenya's Rift Valley extension agents. *Journal of Extension*, 32 (3). Retrieved in March 16, 2005, from <http://www.joe.org/joe1994october/rbl.html>
- McElveen, K. P. (1989). A comparison of job perceptions, job roles, job satisfaction, and career plans of more and less experienced secondary school assistant principals. (Doctoral dissertation, University of South Carolina, Columbia, 1989). *Dissertation Abstract International*, 50 (09), 2735A. (UMI No. AAT 9005130).
- McMillan, J. H., & Schumacher, S. (1997). *Research in education*. (4<sup>th</sup> ed.). New York: Longman.
- Middlemist, D. R., & Hirst, M. A. (1988). *Managerial strategies for performance*. St. Paul: West.
- Miller, N. J. (1985). A description of secondary school principals in Minnesota and their job satisfaction. (Doctoral dissertation, The University of North Dakota, Grand Forks, 1985). *Dissertation Abstract International*, 46 (12), 3555A. (UMI No. AAT8602134).
- Miner, J. B. (1980). *Theories of organizational behaviour*. Hinsdale, IL: Dryden Press.
- Miskel, C., & Heller, E. (1973). The educational work components study: An adapted set of measures for work motivation. *Journal of Experimental Education*, 42(1), 45-50.

- Miskel, C. (1974). Public school principal's leader style, organizational situation, and effectiveness. Final report. Kansas University, Lawrence: National Institute of Education . (Eric Document Reproduction Service No. ED 098689).
- Miskel, C., G., McDonald, D., & Bloom, S. (1983). Structural and expectancy linkages within schools and organizational effectiveness. *Educational Administrative Quarterly*, 19, 49-82.
- Mowday, R. T. (1978). The exercise of upward influence in organizations. *Administrative Science Quarterly*, 23, 213-226.
- Moxley, L. (1977). *Job satisfaction of faculty teaching higher education: An examination of Herzberg's dual factor theory and Porter's needs satisfaction research*. ERIC Document ED 139349.
- Munstenberg, H. (1913). *Psychology and industrial efficiency*. Boston: Houghton Mifflin.
- National Association of Elementary School Principals. (1990). Over 50% of the principals in America will retire in the next 10 years. *Principal*, 70(4), 65.
- National Association of Elementary School Principals. (2003). *NAESP fact sheet on the principalship shortage*. Retrieved December 2, 2006 from <http://www.naesp.org/contentLoad.do?contendl=1097>
- National Association of Elementary School Principals and National Association of Secondary School principals (1998). *Is there a shortage of qualified candidates for openings in the principalship? An exploratory study*. Arlington, VA: Educational Research Service.
- Neal, M. E. (2002). Job satisfaction of Florida's high school assistant principals as a factor in the maintenance of an administrative work force. (Doctoral dissertation, University of Central Florida, Orlando, 2002). *Dissertation Abstract International*, 63 (02), 451A. (UMI No. AAT 3042969).
- Nestor, P. I., Leary, P. (2000). The relationship between tenure and non-tenure track status of extension faculty and job satisfaction. *Journal of Extension*, 38(4), 1-13.
- Newbee, J. E. (1999). *Job satisfaction of middle school principals in Virginia*. Unpublished doctoral dissertation, Virginia Tech. University, Blackburg.



- No Child Left Behind Act. (2001). Public law 107-110 provided for the comprehension of the Elementary and Secondary Education Act of 1965, incorporating specific proposals in such areas as testing, accountability, parentam choice and early reading. Retrieved from <http://www.nces.ed.gov/programs/digest>
- Nunnally, J. C. (1978). *Psychometric theory* (2<sup>nd</sup> ed.) New York: McGraw-Hill.
- O'Neal, S. W. (1986). Classifying job characteristics of educational administrators: An examination of satisfiers and motivators. (Doctoral dissertation, The University of New Mexico, Las Cruces, 1986). *Dissertation Abstract International*, 47 (09), 3269A. (UMI No. AAT 8627954).
- Osbum, W. F. (1993). Principal perceptions of rewards and organizational characteristics as incentives to assume leadership in school improvement.. (Doctoral dissertation, Florida State University, Florida, Tallahassee, 1993). *Dissertation Abstract International*, 54 (02), 396A. (UMI No. AAT 9317634).
- Owen, B. D. (1996). A study of factors affecting job satisfaction among Arkansas secondary principals. (Doctoral dissertation, University of Arkansas, Little Rock, 1996). *Dissertation Abstract International*, 57 (08), 3346A. (UMI No. AAT 9700361).
- Owens, R. (2001). *Organizational behavior in organizations: Instructional leadership and school reform*. Needham Heights, MA: Allyn & Bacon.
- Papa, F. C., Lankford, H., & Wyckoff, J. (2002). *The Attributes and career path of principals: Implications for improving policy*. Albany: State University of New York.
- Patterson, J. (1993). *Leadership for tomorrow's schools*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Pavalko, R. M. (1971). *Sociology of occupation and professions*. Itasca, IL.: Peacock.
- Pearson, Q. M. (1998). Job satisfaction, leisure satisfaction, and psychological health. *Career Development Quarterly*, 46(4), 416-426.
- Penn, C. P. (1985). Satisfiers and dissatisfiers of selected black school administrators in Virginia. (Doctoral dissertation, University of Virginia, Virginia, Charlottesville, 1985). *Dissertation Abstracts International*, 47 (02), 449A. (UMI No. AAT 8608566).

- Phelan, J. C. (1991). Gender differences in equity at work. (Doctoral dissertation, State University of New York at Stony Brook, 1991). *Dissertation Abstract International*, 53 (02), 625A (UMI No. AAT 9220347).
- Phelps, R. J. (1995). Job satisfaction: A study of alternative high school principals. (Doctoral dissertation, University of Southern Carolina, Columbia, 1995). *Dissertation Abstract International*, 57 (02), 539A. (UMI No. ATT9616991).
- Pigford, A., & Tonnsen, S. (1993). *Women in school leadership*. Lancaster, PA, Technomic Publishing Company.
- Pillar, T. J. (1991). Motivation-hygiene theory and lay principals in parish or diocesan affiliated Catholic elementary and secondary schools in Michigan. (Doctoral dissertation, Wayne State University, Michigan, Detroit, 1991). *Dissertation Abstracts International*, 52 (04), 1162A. (UMI No. AAT 9127258).
- Pinder, C. C. (1984). *Work motivation: theory, issues, and applications*. Glenview: Scot Foresman and Company.
- Pinder, C. C. (1998). *Work motivation in organizational behaviour*. Upper Saddle River, N.J.: Prentice-Hall.
- Portin, B., Shen, J., & Williams, R. (1998). The changing principalship and its impact: Voices from principals. *NASSP Bulletin*, 82(602), 1-8.
- Portin, B., Shen, J., & Williams, R. (1999). Job desirability of the high school principalship: A job choice theory perspective. *Educational Administration Quarterly*, 37, 27-57.
- Potter, L. (2001). Solving the principal shortage. *Principal*, 80, 34-37.
- Pulvino, C. A. F. (1979). *Relationship of principal leadership behavior to teacher motivation and innovation*. Unpublished doctoral dissertation, University of Wisconsin.
- Raham, H. (2003). *Principal Portraits*. Retrieved in February 27, 2004, from [http://www.excellenceineducation.ca/analys/C\\_018.3\\_BBB\\_LON.php](http://www.excellenceineducation.ca/analys/C_018.3_BBB_LON.php)
- Rasmussen, A. G. (1990). *The Herzberg's motivation-hygiene theory as it applies to middle school principals*. University of La Verne, California, South California.
- Rayfield, R., & Diamantes, T. (2003). *Principal satisfaction and the shortage of educational leaders*. Retrieved February 27, 2004, from <http://www.principals.org/publications/connections/rayfield.cfm>

- Riehl, C., & Byrd, M. (1997). Gender differences among new recruits to school administration: cautionary footnotes to an optimistic tale. *Educational Evaluation and Policy Analysis*, 19(1), 45-64.
- Roethlisberger, F. J., & Dickson, W. J. (1939). *Management and the worker*. Chicago: Harvard University press.
- Ross, M., & Fletcher, G. J. O. (1985). Attribution and social perception. In G. Lindzey & E. Aronson (Eds.), *The handbook of social psychology* (pp. 73-114) New York: Random House.
- Roza, M., Hill, P., Celio, M., Harvey, J., and Wishon, S. (2003). *A matter of definition: Is there truly a shortage of school principals?* Mimeo, University of Washington.
- Sablatura, D. A. (2002). Comparisons of job satisfaction among urban, suburban, and rural School Principals. (Doctoral dissertation, University of Houston, Texas, 2002). *Dissertation Abstract International* 63 (02) 455A. (UMI No AAT 3042448).
- Sahagun, L. (2000, August 28). Critical shortage of principals seen in L.A. *Los Angeles Times*, p. A1.
- Salancik, G. R., & Pfeffer, J. (1977). An examination of need-satisfaction models of job Attitudes. *Administrative Science Quarterly*, 22, 427-456.
- Saleh, S. D. (1964). A study of attitude change in the pre-retirement period. *Journal of Applied Psychology*, 59, 310-312.
- Salant, P., & Dillman, D.A. (1994). *How to conduct your own survey*. New York: John Wiley & Sons.
- Scarpello, V., & Campbell, J. P. (1983). Job satisfaction. Are all the parts there? *Personnel Psychology*. 36, 577-600.
- Scheffé, H. (1959). *The analysis of variance*. John Wiley & Sons, New York.
- Schmidt, G. T. (1976). Job Satisfaction among secondary school administrators. *Educational Administration Quarterly*, 12 66-82.

- Schmidt, J., Weaver, F., & Aldredge, A. (2001). Perceptions of School Counselor's role and Satisfaction by Newly Hired Counselors and Principals in Eastern North Carolina. Available at <http://www.eric.ed.gov/contentdelivery/servlet/ERICServlet?accno=ED457470>
- Schneider, B., & Alderfer, C. (1973). Three studies of measures of need satisfaction in organizations," *Administrative Science Quarterly*, 18, 489-505.
- Scholl, R. W. (1981). Differentiating Organizational Commitment from Expectancy as a Motivating Force. *Academy of Management Review*, 6(4), 589-599.
- Schwartz, M, Jenusaitis, M., & Stark, H. (1963). Motivational factors among supervisors in the utility industry. *Personal Psychology*, 16(1), 45-53.
- Sergiovanni, T. (1967). Factors which affect satisfaction and dissatisfaction of teachers. *Journal of Educational Administration*, 5, 66-82.
- Sergiovanni, T. (1987). *Educational governance and administration*. Englewood Cliffs, N.J Prentice Hill.
- Sergiovanni, T. (2001). *The Principalship. A reflective practice perspective*. (4<sup>th</sup> ed.). Boston, MA: Allyn & Bacon.
- Seyfarth, J. T. (1999). *The principal. New leadership for new challenge*. New Jersey: Prentice-Hall, Inc.
- Shafritz, J. M., Koeppel, R. P., & Soper, E. W. (1988). *The facts on file dictionary of education*. New York: Harper & Row.
- Shakeshaft, C. (1989). *Women in educational administration*. Beverly Hills, CA: Sage Publications.
- Siegel, L., & Lane, I. M. (1982). *Personnel and organizational psychology*. Homewood, IL: Irwin.
- Smith, P., Kendall, L. M., & Hulin, C. L. (1969). *The measurement of satisfaction in work and retirement*. Skokie, IL: Rand McNally.
- Smith, D., & Holdaway, E. A. (1995). Constraints on the effectiveness of schools and their principals. *The International Journal of Educational management*, 9(5), 31-39.
- Solly, D. C., & Hohenshil, T. H. (1986). Job satisfaction of school psychologist in a primary rural state. *School Psychology Review*, 15(1), 119-126.

- Spector, D. C. (1985). Measurement of human service staff satisfaction: Development of the job satisfaction survey. *American Journal of Community Psychology* 13, 693-713.
- Spector, P. (1997). *Job Satisfaction: Application, assessment, causes, and consequences*. Thousand Oaks, CA: Sage Publications, Inc.
- Staw, B. M., & Cummings, L. L. (1990). (Eds). *Research in Organizational Behavior*, Greenwich, CT, JAI Press, Inc.
- Steinberg, J. (2000, September 3). Nation's school struggling to find enough principals. *New York Times*, p.A1.
- Steers, R. M., & Porter, L. W. (Eds). (1979). *Motivation and work behavior* ((3<sup>rd</sup> ed.). New York: McGraw-Hill.
- Steffen, G. F. (1985). The school principal: Sources of organizational stress and the motivation-hygiene theory (stress variables, administrators characteristics, job satisfaction, work attitudes). (Doctoral dissertation, Loyola University of Chicago, 1985). *Dissertation Abstract International* 45 (12), 350A . (UMI No 8503380).
- Stemple, J. D. (2004). *Job satisfaction of high school principals in Virginia*. Unpublished doctoral dissertation, Virginia Polytechnic Institute and State University, Blacksburg..
- Stockford, O., & Kunze, K. (1950). Psychology and the paycheck. *Personnel*, 27(2), 129-146.
- Surbida, M. M. (1983). A study of job satisfaction of elementary principals in California. (Doctoral dissertation, University of La Verne, California, 1983). *Dissertation Abstracts International*, 45 (04), 1010A. (UMI No ATT 8405638).
- Sutter, M. R. (1994). Job and career satisfaction of secondary school assistant principals. (Doctoral dissertation, Kent State University, Ohio, 1994). *Dissertation Abstract International*, 56 (06), 2072A. (UMI No. AAT 95352420).
- Taylor, F. W. 1911. *The principles of scientific management*. New York; Harper.
- Thompson, D. P., McNamara, J. F., & Hoyle, J. R. (1997). Job satisfaction in educational organizations: A synthesis of research findings. *Educational Administration Quarterly* 33(1), 7-37.

- Thorndyke, E. L. (1934). *Prediction of vocational success*. New York: Commonwealth Fund, 1934.
- Tirozzi, G.N. & Ferrandino, V. L. (2001). *How do you reinvent a principal?*  
Retrieved September 12, 2001 from  
[http://www.nassp.org/news/views/rnvnt\\_prncpl\\_edwk101.htm](http://www.nassp.org/news/views/rnvnt_prncpl_edwk101.htm)
- Tirozzi, G. N., & Ferrandino, V. L. (2003). *The shortage of principals continues*.  
Retrieved October 2003, from  
[http://www.principals.org/advocacy/iews/prin\\_short1000.cfm](http://www.principals.org/advocacy/iews/prin_short1000.cfm)
- Ubben, G. C., Hughes, L. W., & Norris, C. J. (2004). *The principal: creative leadership for excellence in schools*. (5<sup>th</sup> ed.). Pearson Education, MA: Boston.
- U.S. Department of Labor, Bureau of Labor Statistics. *Occupational outlook handbook*. (1996-1997). Available from [www.bls.gov.oco](http://www.bls.gov.oco)
- Varca, P. E., Shaffer, G. S., & McCauley, C. D. (1983). Sex differences in job satisfaction revised. *Academy of Revised Journal*, 26(2), 348-354.
- Vroom, V. H. (1964). *Work and motivation*. New York, Willey.
- Young, I. (1984). An examination of job satisfaction for female and male public school superintendents. *Planning and Changing*, 15, 114-124.
- Walker, L. R., & Thomas, K. W. (1982). Beyond expectancy theory: An integrative motivational model from health care. *Academy of Management Review*, 7(2), 187-194.
- Wanous, J. P. (1974). Maslow reconsidered: A review of research on the need hierarchy theory. *Journal of Applied Psychology*, 59, 616-622.
- Weiner, B. (1985). An attributional theory of achievement motivation and emotion. *Psychological Review*, 92, 548-573.
- Weiner, B. (1986). *An Attributional Theory of Motivation and Emotion*. New York: Springer Verlag.
- Weir, M. (1976). *Job Satisfaction. Challenge and response in modern Britain*. Eric Butterwort & David Weir (Eds.). Fontana: William Collins Sons & Co. Ltd Glasgow.

- Weiss, D. J., Dawis, R.V., England, G. W., & Lofquist, L. H. (1967). *Manual for the Minnesota Satisfaction Questionnaire*. Minneapolis, MN: The university of Minnesota Press.
- Weiss, H. M., & Cropazano, R. (1996). Affective events theory: A theoretical discussion of the structure, causes and consequences of affective experiences at work. *Research in Organizational Behaviour*, 18, 1-74.
- Wernimont, P. F., & Dunnette, M. D. (1964, May). *Intrinsic and extrinsic factors in job satisfaction*. Paper read at Midwestern Psychological Association, Saint Louis, Missouri.
- Wisher, L. G. M. (1984). The relationship between the motivation-hygiene factors present in a school district and the job satisfaction of principals. (Doctoral dissertation, University of Southern Carolina, Columbia, 1984). *Dissertation Abstracts International*, 45 (10), 3047A. (UMI No. ATT 05554540).

APPENDIX A

JOB SATISFACTION QUESTIONNAIRES - 1999



## IOWA PRINCIPAL JOB SATISFACTION SURVEY

University of Northern Iowa - Spring 1999

<b>Demographics</b>
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Please answer the following questions:

1. What is your gender?  
☐ male                      ☐ female
  
2. What is your age?  

<input type="checkbox"/> 35 or under	<input type="checkbox"/> 41 - 45	<input type="checkbox"/> 51 - 55	<input type="checkbox"/> 61 - 65
<input type="checkbox"/> 36 - 40	<input type="checkbox"/> 46 - 50	<input type="checkbox"/> 56 - 60	<input type="checkbox"/> 66+
  
3. What is your Racial/Ethnic classification?  

<input type="checkbox"/> White	<input type="checkbox"/> Native American	<input type="checkbox"/> Black	<input type="checkbox"/> Hispanic
<input type="checkbox"/> Asian	<input type="checkbox"/> Other (please specify) _____		
  
4. What is the certified (reported to DE) enrollment of your school?  

<input type="checkbox"/> 0-299	<input type="checkbox"/> 600-999	<input type="checkbox"/> 1300+
<input type="checkbox"/> 300-599	<input type="checkbox"/> 1000-1299	
  
5. How many years have you served, including the current year, as a principal?  

<input type="checkbox"/> 1-5	<input type="checkbox"/> 11-15	<input type="checkbox"/> 21-25	<input type="checkbox"/> 31+
<input type="checkbox"/> 6-10	<input type="checkbox"/> 16-20	<input type="checkbox"/> 26-30	
  
6. How many years, including this year have you served as principal in your present school?  

<input type="checkbox"/> 1-5	<input type="checkbox"/> 6-10	<input type="checkbox"/> 11+
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7. Please identify your type of school.  
☐ elementary      ☐ middle/junior high   ☐ high school

8. What percent of your day is spent on educational leadership activities i.e., instructional leadership, evaluation, curriculum development, consensus building, data collection, data analysis, etc?

☐ 0-5%      ☐ 6-25%      ☐ 26-45%      ☐ 46%-65%      ☐ more than 65%

9. What percent of your day is spent on management activities i.e. student discipline, scheduling, planning, supervising, personnel management, etc?

☐ 0-5%      ☐ 6-25%      ☐ 26-45%      ☐ 46%-65%      ☐ more than 65%

10. What is your highest academic degree?

\_\_\_\_\_ Doctorate \_\_\_\_\_ Master's \_\_\_\_\_ Educational Specialist

11. Are you considering retirement in the next:

\_\_\_\_\_ 1 – 3 years      \_\_\_\_\_ 7 – 9 years  
\_\_\_\_\_ 4 – 6 years      \_\_\_\_\_ 10 or more years

12. Do you currently hold Iowa Superintendent Certification?

\_\_\_\_\_ Yes      \_\_\_\_\_ No

Please respond to each question or statement. Unless directed to do otherwise, please check ( ☒ ) only ONE response per question.

1. Principalship is often described as a stressful occupation. During the routine performance of principal's role do you feel?

\_\_\_\_\_ no stress      \_\_\_\_\_ little stress      \_\_\_\_\_ moderate stress  
\_\_\_\_\_ considerable stress      \_\_\_\_\_ great stress

2. The principalship requires attention to many extra-curricular activities which can also add time commitments to the position. Do the extra curricular activities cause you:

\_\_\_\_\_ no stress      \_\_\_\_\_ little stress      \_\_\_\_\_ moderate stress  
\_\_\_\_\_ considerable stress      \_\_\_\_\_ great stress

3. If you were to start your career over again, how likely would you be to become a principal:

\_\_\_\_\_definitely would      \_\_\_\_\_probably would      \_\_\_\_\_undecided  
 \_\_\_\_\_probably would      \_\_\_\_\_definitely would not

4. Do you consider your current principalship your final occupational goal?

\_\_\_\_\_yes      \_\_\_\_\_no

5. Would you urge your own child to pursue an educational leadership career?

\_\_\_\_\_definitely would      \_\_\_\_\_probably would      \_\_\_\_\_undecided  
 \_\_\_\_\_probably would not      \_\_\_\_\_definitely would not

6. Does your district have merit or incentive pay for principals?

\_\_\_\_\_yes      \_\_\_\_\_no

7. Have you ever had a paid sabbatical leave as a principal?

\_\_\_\_\_yes      \_\_\_\_\_no

8. What is the length of your contract?

\_\_\_\_\_10 month      \_\_\_\_\_10.5 month      \_\_\_\_\_11 month  
 \_\_\_\_\_12 month      \_\_\_\_\_other

9. When were you last evaluated as a principal by your superintendent?

\_\_\_\_\_within last year      \_\_\_\_\_within last two years      \_\_\_\_\_three to five years ago  
 \_\_\_\_\_more than five years ago      \_\_\_\_\_never

10. From whom are the opinion about performance evaluation normally solicited? (Check (✓) all that apply).

\_\_\_\_\_board      \_\_\_\_\_superintendent      \_\_\_\_\_teachers      \_\_\_\_\_parents      \_\_\_\_\_students

11. For each of the following please indicate whether your responsibilities have increased, decreased, or stayed the same. Indicate I for Increase; D for Decrease, NC for No Change.

building level authority/responsibility	I	D	N
curriculum development	I	D	N
development of instructional practices	I	D	N
personnel management	I	D	N
fiscal decision making	I	D	N
student assessment and accountability	I	D	N

12. How much influence do you think you have on school district decision that affect your building?

\_\_\_\_\_much influence    \_\_\_\_\_some influence    \_\_\_\_\_little influence  
 \_\_\_\_\_no influence

13. What is the attitude of most parents toward your school and its programs?

\_\_\_\_\_very positive    \_\_\_\_\_positive    \_\_\_\_\_neutral    \_\_\_\_\_negative  
 \_\_\_\_\_very negative

14. Does your district have a formal induction or mentoring program for new principals?

\_\_\_\_\_yes    \_\_\_\_\_no    \_\_\_\_\_I do not know

15. Would you characterize the university preparation of recent candidates for school principal positions in terms of leading and managing change, establishing vision, developing mission, etc as being:

\_\_\_\_\_excellent    \_\_\_\_\_adequate    \_\_\_\_\_very poor

16. In spite of positive direction in recent years, it is necessary to focus upon the reorganization and redirection of university administrator preparation programs.

\_\_\_\_\_strongly agree    \_\_\_\_\_agree    \_\_\_\_\_neutral  
 \_\_\_\_\_disagree    \_\_\_\_\_strongly disagree

17. What do you think discourages or prevents teachers who are certified as principals from applying for principal positions (Rank order with 1 being most important and 5 or 6 being least important).

\_\_\_\_\_ stress          \_\_\_\_\_ time demand          \_\_\_\_\_ community resistance to change  
 \_\_\_\_\_ staff resistance to change          \_\_\_\_\_ per diem salary          \_\_\_\_\_ other

18. Identify factors which inhibit the effectiveness of the principalship. (Rank order with 1 being most important and 9 or 10 being least important).

\_\_\_\_\_ inadequate funding          \_\_\_\_\_ negotiated agreement  
 \_\_\_\_\_ inexperienced and poor performance of employees  
 \_\_\_\_\_ board and superintendent interference  
 \_\_\_\_\_ community politics  
 \_\_\_\_\_ lack of time  
 \_\_\_\_\_ inadequate preservice and inservice skills that do not much district leadership needs  
 \_\_\_\_\_ community and /or staff resistance to change  
 \_\_\_\_\_ other

19. Identify the issues of greatest urgency in your school district. (Rank order with 1 being most important and 12 or 13 being least important).

\_\_\_\_\_ student achievement  
 \_\_\_\_\_ student discipline  
 \_\_\_\_\_ staff development  
 \_\_\_\_\_ staff evaluation  
 \_\_\_\_\_ finance/funding  
 \_\_\_\_\_ negotiations  
 \_\_\_\_\_ collaborative decision making  
 \_\_\_\_\_ planning/goal setting/transformation  
 \_\_\_\_\_ obtaining community support  
 \_\_\_\_\_ curriculum and instruction development  
 \_\_\_\_\_ recruitment, selection,  
 \_\_\_\_\_ retention of qualified teachers  
 \_\_\_\_\_ ability to integrate technology  
 \_\_\_\_\_ others

20. What could your superintendent do that he/she currently is not doing to give you greater support?

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21. For other than retirement reasons, have you seriously considered leaving the principalship?

\_\_\_\_\_yeas                      \_\_\_\_\_no

22. What would you suggest to help overcome the shortage of principals Iowa schools currently face? (Rank order with 1 being most important and 5 or 6 being least important).

\_\_\_\_\_certify leaders outside education  
 \_\_\_\_\_intensify recruitment of teachers to the principalship  
 \_\_\_\_\_provide paid sabbaticals to teachers to prepare for the principalship  
 \_\_\_\_\_develop district policies and practices that support leadership capacity building  
 \_\_\_\_\_decrease certification requirements      \_\_\_\_\_other

23. Is the IPERS 7 year final average salary causing you to stay in the principalship longer than you planned?

\_\_\_\_\_yes                      \_\_\_\_\_no

24. When you reach the Rule of 88, if legislation has changed IPERS benefit to your high 3-year salary average effective July 1, 1999, would you retire:

\_\_\_\_\_June 30, 1999      \_\_\_\_\_in the next 1 – 2 years      \_\_\_\_\_in the next 3 - 4 years  
 \_\_\_\_\_in the next 5 -6 years      \_\_\_\_\_several years from now

25. What could boards of education do to make the principalship more attractive to those considering this positions?

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Please indicate the degree to which you are satisfied with the following 20 conditions, using the scale of: 1 = Very Satisfied; 2 = Moderately Satisfied; 3 = Neutral; 4 = Moderately Dissatisfied; 5 = Very Dissatisfied

Please circle the number for each item that best indicates your feeling.

**VS MS N MD VD**

1.	The sense of accomplishment you receive from your work.	1	2	3	4	5
2.	Professional growth opportunities provided for you.	1	2	3	4	5
3.	The adequacy of administrative services provided for you.	1	2	3	4	5
4.	The adequacy of support services provided for you.	1	2	3	4	5
5.	Community demands placed on you as a principal outside of the school.	1	2	3	4	5
6.	Extra-curricular demands placed on you as a principal.	1	2	3	4	5
7.	Time available for activities that put balance in your life.	1	2	3	4	5
8.	Relationship with the administrative team/cabinet.	1	2	3	4	5
9.	Relationship with the board of education.	1	2	3	4	5
10.	Relationship with the parents of your school.	1	2	3	4	5
11.	Relationship with the teachers of your school.	1	2	3	4	5
12.	The consistency of the board in making decisions in the best interest of children.	1	2	3	4	5
13.	How well the board of education acknowledges your accomplishments.	1	2	3	4	5
14.	Your annual salary.	1	2	3	4	5
15.	The community's image of school administrators.	1	2	3	4	5
16.	Time spent on management tasks, i.e., budgeting, staffing, planning, etc.	1	2	3	4	5
17.	Time spent on leadership tasks i.e. facilitating development of a shared vision for the school, etc.	1	2	3	4	5
18.	The quality of your relationship with the superintendent.	1	2	3	4	5
19.	The process the superintendent uses to evaluate you.	1	2	3	4	5
20.	All things considered, indicate your overall level of job satisfaction.	1	2	3	4	5

# IOWA PRINCIPAL JOB SATISFACTION SURVEY

University of Northern Iowa – Fall 2005

## Demographics

Please answer the following questions:

1. What is your gender?  
☐ male                      ☐ female
2. What is your age?  

<input type="checkbox"/> 35 or under	<input type="checkbox"/> 41 - 45	<input type="checkbox"/> 51 – 55	<input type="checkbox"/> 61 – 65
<input type="checkbox"/> 36 - 40	<input type="checkbox"/> 46 - 50	<input type="checkbox"/> 56 – 60	<input type="checkbox"/> 66+
3. What is your Racial/Ethnic classification?  

<input type="checkbox"/> White	<input type="checkbox"/> Native American	<input type="checkbox"/> Black	<input type="checkbox"/> Hispanic
<input type="checkbox"/> Asian	<input type="checkbox"/> Other (please specify) _____		
4. What is the certified (reported to DE) enrollment of your school?  

<input type="checkbox"/> 0-299	<input type="checkbox"/> 600-999	<input type="checkbox"/> 1300+
<input type="checkbox"/> 300-599	<input type="checkbox"/> 1000-1299	
5. How many years have you served, including the current year, as a principal?  

<input type="checkbox"/> 1-5	<input type="checkbox"/> 11-15	<input type="checkbox"/> 21-25	<input type="checkbox"/> 31+
<input type="checkbox"/> 6-10	<input type="checkbox"/> 16-20	<input type="checkbox"/> 26-30	
6. How many years, including this year have you served as principal in your present school?  

<input type="checkbox"/> 1-5	<input type="checkbox"/> 6-10	<input type="checkbox"/> 11+
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7. Please identify your type of school.  

<input type="checkbox"/> elementary	<input type="checkbox"/> middle/junior high	<input type="checkbox"/> high school
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8. What percent of your day is spent on educational leadership activities i.e., instructional leadership, evaluation, curriculum development, consensus building, data collection, data analysis, etc?

☐ 0-5%      ☐ 6-25%      ☐ 26-45%      ☐ 46%-65%      ☐ more than 65%

9. What percent of your day is spent on management activities i.e. student discipline, scheduling, planning, supervising, personnel management, etc?

☐ 0-5%      ☐ 6-25%      ☐ 26-45%      ☐ 46%-65%      ☐ more than 65%

Please indicate the degree to which you are satisfied with the following 20 conditions, using the scale of: 1 = Very Satisfied; 2 = Moderately Satisfied; 3 = Neutral; 4 = Moderately Dissatisfied; 5 = Very Dissatisfied

Please circle the number for each item that best indicates your feeling.

**VS MS N MD VD**

1.	The sense of accomplishment you receive from your work.	1	2	3	4	5
2.	Professional growth opportunities provided for you.	1	2	3	4	5
3.	The adequacy of administrative services provided for you.	1	2	3	4	5
4.	The adequacy of support services provided for you.	1	2	3	4	5
5.	Community demands placed on you as a principal outside of the school.	1	2	3	4	5
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7.	Time available for activities that put balance in your life.	1	2	3	4	5
8.	Relationship with the administrative team/cabinet.	1	2	3	4	5
9.	Relationship with the board of education.	1	2	3	4	5
10.	Relationship with the parents of your school.	1	2	3	4	5
11.	Relationship with the teachers of your school.	1	2	3	4	5
12.	The consistency of the board in making decisions in the best interest of children.	1	2	3	4	5

13.	How well the board of education acknowledges your accomplishments.	1	2	3	4	5
14.	Your annual salary.	1	2	3	4	5
15.	The community's image of school administrators.	1	2	3	4	5
16.	Time spent on management tasks, i.e., budgeting, staffing, planning, etc.	1	2	3	4	5
17.	Time spent on leadership tasks i.e. facilitating development of a shared vision for the school, etc.	1	2	3	4	5
18.	The quality of your relationship with the superintendent.	1	2	3	4	5
19.	The process the superintendent uses to evaluate you.	1	2	3	4	5
20.	All things considered, indicate your overall level of job satisfaction.	1	2	3	4	5

APPENDIX B  
COVER LETTER  
REMINDER

Dear Colleague:

I am currently engaged in completing the research requirements for a doctoral degree at the University of Northern Iowa. I am conducting a study of job satisfaction of Iowa elementary, middle, and, high public school principals. Results will be compared to an Iowa public school principals study done six years ago. I am working with Dr. David Else, Director of the Institute for Educational Leadership, who is my adviser.

In recent decades, job satisfaction has been the theme of numerous studies in both public and private organizations. As some researchers report, the examinations into the job satisfaction of school administrators have been frequently overlooked. Little attention has been given to job satisfaction among public school principals serving at elementary and secondary levels.

On a daily basis a wide variety of demands are being placed on principals. The legislature and taxpayers demand more services, industry expects competent workers, parents insist that social issues be addressed, and the public wants achievement scores to improve. As a result, principals may be incredibly pressed for time and energy. Determining the job satisfaction level of principals in Iowa may provide insight into the support that principals need in order to feel satisfaction in their jobs.

You may be assured of complete confidentiality. Your individual identity and that of your school will be used to monitor the return of questionnaires but you will not be identified in the analysis and reporting data. All data will be studied as group data. No names will be attached to the questionnaires.

As to the questionnaire, I believe you will find the instructions quite clear and understandable. Furthermore, your time involvement should be no more than 10 minutes. Risks of participation are minimal and there are no direct benefits.

If you should have any specific questions, please free to call me at 319-273-2026 or the project investigator's faculty advisor, David Else, Director of the Institute for Educational Leadership, University of Northern Iowa, 319-273-3358. You can also contact the office of the Human Participation Coordinator, University of Northern Iowa, at 319-273-2748, for answers to questions about rights of research participants and the participant review process.

I would like to express sincere appreciation to you for completing the questionnaire.

Sincerely,

Boris Sodoma  
Doctoral student

PLEASE RETURN THIS QUESTIONNAIRE IN THE ENCLOSED,  
SELF-ADDRESSED, STAMPED ENVELOPE BY October 3, 2005

Boris Sodoma  
Institute for Educational Leadership  
629 Schindler Education Center  
University of Northern Iowa  
Cedar Falls, IA 50614-0614

## REMINDERS

Dear Colleague:

Two weeks ago, a questionnaire seeking your opinion about job satisfaction of Iowa public school principals was mailed to you.

If you have already completed and returned the questionnaire to me, please accept my sincere thanks. If not, please consider replying by October 12, 2005. I am especially grateful for your help because I believe that your response will be very useful to state legislators and policy makers in Iowa.

If you did not receive a questionnaire, or if it was misplaced, please call me at 319-273-3358, 2026 and I will get another one in the mail to you today.

Sincerely,

Boris Sodoma  
Doctoral student  
Institute for Educational Leadership  
629 Schindler Education Center  
University of Northern Iowa  
Cedar Falls, IA, 50614-0614